FEDOSEYEV, P.G.

Design of electronic voltage regulators. Trudy LIKI no. 5:62-75 '59. (MIRA 13:12)

1. Kafedra tekhnicheskoy elektroniki Leningradskogo instituta kinoinzhenerov.

(Voltage regulators)

PHASE I BOOK EXPLOITATION 807/4447

Fedoseyev, Pavel Gavrilovich

Vypryamiteli i stabilizatory (Rectifiers and Regulators) Moscow, Iskusstvo, 1960. 517 p. 5,200 copies printed.

Ed.: L.O. Eyzymont; Tech. Ed.: Ye. Ya. Reyzman.

Reviewers: I.N. Oskolkov, Candidate of Technical Sciences.

PURPOSE: This book is approved by the Upravleniye uchebnykh zavedeniy i kadrov (School and Personnel Administration) of the Ministerstvo kul'tury RSFSR (Ministry of Culture RSFSR) as a textbook for students in the Leningradskiy Institut kinoinzhenerov (Leningrad Institute of Motion Picture Engineers). It may also be used by students in related courses and technical personnel engaged in the design or operation of power supply systems.

COVERAGE: The book represents a general and systematic presentation of lectures delivered by the author for the course "Power Supply and Regulation Systems" in the Leningrad Institute of Motion Picture Engineers. The book contains information on rectifiers and on the general theoretical principles of

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rectifiers and smoothing filters. It presents problems related to voltage and current regulation and stabilization, including a series of hitherto unpublished data on the computation of certain voltage-regulator circuits as well as an examination of standard circuits of power-supply systems and the specific features of objects supplied with power. Such topics as electromechanical supply sources, vibrapacks, protection from radio interference, and methods of designing power-supply systems are not examined because of the limited intent of the book. The author thanks I.N. Oshnikov, Candidate of Technical Sciences, reviewer of the book, and Ye. O. Fedoseyeva. There are 82 references, all Soviet.

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FEDOSEYEV, P.G.

Effect of the batching of the magnetic circuits on the characteristics of saturable reactors. Trudy L'KI no.7:65-72 '61. (MIRA 18:3)

1. Kafedra tekhnicheskoy elektroniki Leningradskogo instituta kinoinzhenerov.

FEDOSEYEV, Pavel Gavrilovich; ZHERDETSKAYA, N.N., red.; ZYKIN, V.I., tekhn. red.

[Electrical engineering and electric equipment of motion-picture theaters] Elektrotekhnika i elektrooborudovanie kinoustanovok. Izd.3., perer. i dop. Moskva, Iskusstvo, 1963. 423 p. (MIRA 17:2)

FEDOSEYEV, P.G.; SAVICHEV, S.S.

Transistorized magnetic voltage stabilizers for low voltage potential. Trudy LIKI no.10:111-121 '64. (MIRA 18:9)

1. Kafedra tekhnicheskoy elektroniki Leningradskogo instituta kinoinzhenerov.

L 22925-66

ACC NR: AP6007681 (A) SOURCE CODE: UR/0413/66/000/003/0059/0059

AUTHOR: Konstantinov, V. N.; Semenov, V. G.; Voykhanskiy, P. G.; Fedoseyev, V. I.

ORG: none

TITLE: Unit for longitudinal orientation of a polymer film. Class 39, No. 178483 [Announced by the Scientific Research Institute for the Construction of Chemical Machinery (Nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 59

TOPIC TAGS: film processing, photographic equipment

ABSTRACT: An Author Certificate has been issued describing a unit for the longitudinal orientation of polymer films. The machine is equipped with one set of retarding rolls and another set of pulling rolls. To reduce the transverse shrinkage of the film and control its deformation rate, an orientation roll, which can be heated up, is installed between both the pulling and retarding rolls and equipped with a mechanism for moving the film in the vertical plane. [LD]

SUB CODE: 14/ SUBM DATE: 07Jan65/

film processing

Card 1/1 UDC: 678.017.4

FEDOSEYEV, P.N.

[Basic characteristics of production; lectures given at the Party University under the jurisdiction of the Central Committee of the Communist Party of the Soviet Union] Osnovnye osobennosti proizvodstva. Lektsii, prochitannye v Vysshei partiinoi shkole pri TsK KPSS. Moskva, 1954. 47 p. (MLRA 7:11)
(Efficiency, Industrial) (Industrial relations)

FEDOSEYEV, PETR NIKOLAYEVICH

Epp
.R9120

Proizvoditel'nyye sily i proizvodstvennyye otnosheniya sotsialisticheskogo obshchestva (Productive strength and industrial relations of socialist societies) Moskva, 1955.

61 p.
At head of title: Vysshaya Partiynaya Shkola pri tsk KPSS.

TOREZ, Moris [Thorez, Maurice]; ROMANOV, A.V., red.; RUMYANTSEV, A.M., red.; TROPKIN, N.V., red.; FEDOSEYEV, P.N., red.; POLYAKOV, A.P., red.; SERBIN, Ye.M., tekhn.red.

[New data on the pauperization of French workers] Novye dannye ob obnishchanii trudiashchikhsia Frantsii. Moskva, Gos.izd-vo polit.lit-ry, 1959. 84 p. (MIRA 14:1)

1. General'nyy sekretar' Frantsuzskoy kommunisticheskoy partii (for Torez).
(France--Labor and laboring classes)
(France--Cost and standard of living)

TSEDENBAL, Yu.; BARULINA, L.G., red.; ROMANOV, A.V., red.; RUMYANTSEV, A.M., red.; TROPKIN, N.V., red.; FEDOSEYEV, P.N., red.; BARULINA, L.G., red.; SERBIN, Ye.M., tekhn.red.

[Socialist transformation in the Mongolian People's Republic] Sotsialisticheskie preobrazovaniia v Mongol'skoi Narodnoi Respublike. Moskva, Gos.izd-vo polit.lit-ry, 1960. 117 p. (MIRA 14:3)

1. Pervyy sekretar' TSentral'nogo Komiteta Mongol'skoy narodno-revolyutsionnoy partii (for TSedenbal).
(Mongolia--Economic policy)

NOVOTNYY, Antonin; POLYAKOV, A.P., red.; ROMANOV, A.V., red.; RUMYANTSEV, A.M., red.; TROPKIN, N.V., red.; FEDOSEYEV, P.N., red.; SERBIN, Ye.M., tekhn.red.

[For the victory of peace and socialism. Report to the 11th Congress of the Communist Party of Czechoslovakia on the activities of the Central Committee and the main tasks of the present. Armed with the results of the 21st Congress of the CPSU, forward, to the completion of the socialist construction of our country] Za pobedu mira i sotsializma. Otchetnyi doklad XI s"ezdu Kommunisticheskoi partii Chekhoslovakii o deiatel'nosti TSentral'nogo Komiteta i glavnye zadachi tekushchego momenta. Vooruzhennye itogami XXI s"ezda KPSS, vpered, k zaversheniiu stroitel'stva sotsializma v nashei strane. Moskva, Gos.izd-vo polit.lit-ry, 1960. 141 p.
Translated from the Czech. (MIRA 13:12)
(Czechoslovakia--Economic policy)

FEDOSEYEV, P.N., akademik

Cooperation in sciences is the key to success. Tekh.mol. 29 no.9:24 '61. (MIRA 14:10)

1. Direktor Instituta filosofii AN SSSR.
(Research)

POSPELOV, P.N., akademik; MINTS, A.L., akademik; ALEKSANDROV, A.P., akademik; FEDOSEYEV, P.N., akademik; LAVRENT'YEV, M.A., akademik; BERG, A.I., akademik; PETROVSKIY, I.G., akademik; SIDORENKO, A.V.; SKRYABIN, G.K., kand.biolog.nauk; KONSTANTINOV, B.P., akademik; GOLUNSKIY, S.A.; SHUBNIKOV, A.V., akademik; BLOKHINTSEV, D.I.; DORODNITSYN, A.A., akademik; KEDROV, B.M.; SISAKYAN, N.M., akademik

Discussing the reports. Vest. AN SSSR 31 no.12:49-66 D '61.
(MIRA 14:12)

1. Chleny-korrespondenty AN SSSR (for Sidorenko, Golunskiy, Blokhintsev, Kedrov).
(Research)

FEDOSEYEV, P.N.

Communism and philosophy. Magy tud 68 no.3:141-151 Mr '61. (EEAI 10:6)

1. A Szovetunio Tudomanyos Akademiajanak tagja, a Magyar Tudomanyos Akademia tiszteleti tagja.
(Communism) (Marx, Karl) (Philosophy)

ARZUMANYAN, A.A., akademik; BERG, A.I., akademik; ZHUKOV, Ye.M., akademik; SEMENOV, N.N., akademik; VINOGRADOV, V.V., akademik; FRANTSEV, Yu.P.; SHCHERBAKOV, D.I., akademik; ANISIMOV, I.I.; GATOVSKIY, L.M.; IOVCHUK, M.T.; FEDOSEYEV, P.N., akademik; ROMASHKIN, P.S.; KONSTANTINOV, F.V.; MITIN, M.B., akademik; YELYUTIN, V.P.; PLOTNIKOV, K.N.; PRUDENSKIY, G.A.; YUDIN, P.F., akademik; RYBAKOV, B.A., akademik; KONSTANTINOV, B.P., akademik; KHVOSTOV, V.M.; KEDROV, B.M.; MARKOV, A.A.; BAISHEV, S.B., akademik; ALEKSEYEV, M.N., prof.; SKAZKIN, S.D., akademik; ALEKSANDROV, A.D.; POSPELOV, P.N., akademik

Discussion of L.F. Il'ichev's rreport. Vest. AN SSSR 32 no.12:19-50 D '62. (MIRA 15:12)

1. Chleny-korrespondenty AN SSSR (for Aleksandrov, Frantsev, Anisimov, Gatovskiy, Iovchuk, Romashkin, Konstantinov, Yelyutin, Plotnikov, Prudenskiy, Khvostov, Kedrov, Markov). 2. AN Kazakhskoy SSR (for Baishev).

(Research)

PROCESSES AND PROPERTIES INDEX

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The condensation of ethylene and acetylene. N. S. Kozlov and P. N. Fedoseev. *Sintet. Kauchuk* 3, No. 5, 30-8 (1934); *Chem. Zentr.* 1935, II, 1801; cf. *C. A.* 31, 4320[8,9]; 32, 885[5,6].—Expts. are reported on the condensation of C_2H_4 and C_2H_2 to form butadiene under the influence of Al_2O_3, Al_2O_3-activated C, activated C, NiO, $ZnCl_2$, NiO-asbestos and Ni on Al_2O_3 as catalysts. The gas mixt. was led over the catalyst at 200-600°. With Al_2O_3 a liquid condensate was first formed at 600° but only benzene could be detected in it. Activated C was the most suitable catalyst but even with it the butadiene yield was unsatisfactory. Ni was no more satisfactory as a catalyst than Al_2O_3.

W. A. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

BC

a-3

Catalytic condensation of acetylene with aromatic amines. I. Condensation of acetylene with aniline in presence of cuprous and cupric chlorides. N. S. Kozlov and P. N. Fedoseev (J. Gen. Chem. Russ., 193[illegible], 6, [illegible]).—NH_2Ph and C_2H_2 in presence of $CuCl_2$ yield a product, from which quinaldine (I) and tetrahydroquinaldine (II) are obtained by distillation. In presence of excess of NH_2Ph cis-trans-NHPh·CHMe·CH:CH·NHPh (III), also affording (I) and (II) when heated, is obtained. In presence of CuCl the products isolated after 1—10 days were (I) ([illegible]% yield), (II), (III), and NHPhEt; $NPhEt_2$ and NHPhBu were not found. The process is represented: $2NH_2Ph + C_2H_2 \rightarrow$ $CHMe(NHPh)_2$ (IV); 2(IV) → $2NH_2Ph$ + (III); $NH_2Ph + C_2H_2 \rightarrow$ NPh:CHMe (V); 2(V) → (III) → (I) + $NH_2Ph + H_2$; (I) + $2H_2$ → (II). The catalytic action of CuCl and $CuCl_2$ appears to depend on formation of triple salts with NH_2Ph and C_2H_2. R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

BC

d-3

PROCESSES AND PROPERTIES INDEX

Action of alkalis on aromatic ketones. N. S. Kozlov, P. N. [illegible], and L. E. Olifson (J. Gen. Chem. Russ., 1936, 6, 250—264).—Ketones of the type $C_6H_4R\cdot COPh$ decompose when heated at 250—300° for 60 min. with KOH, to yield $C_6H_4R\cdot CO_2H$ + C_6H_6, whilst with $C_6H_3R_2\cdot COPh$ the products are $C_6H_4R_2$ and BzOH. Thus o- and p-$C_6H_4Et\cdot COPh$ yield o- and p-$C_6H_4Et\cdot CO_2H$ and C_6H_6. p-$C_6H_4Pr^{\beta}\cdot COPh$ affords p-$C_6H_4Pr^{\beta}\cdot CO_2H$ (I) and C_6H_6. 4:4'-diisopropylbenzophenone, b.p. 195—196°/1 mm. (from $PhPr^{\beta}$ and $COCl_2$ in presence of $AlCl_3$), gives (I) and $PhPr^{\beta}$, and 4:4'-diethylbenzophenone, b.p. 344° (from PhEt, $COCl_2$, and $AlCl_3$), yields p-$C_6H_4Et\cdot CO_2H$ and PhEt, whilst 2:4-diisopropylbenzophenone, b.p. 334—335° (from m-$C_6H_4Pr^{\beta}_2$ (II) and BzCl in presence of $AlCl_3$), gives (II) and BzOH, and $C_6H_3MePr^{\beta}\cdot COPh$ yields $C_6H_3MePr^{\beta}\cdot CO_2H$, BzOH, C_6H_6, and p-cymene. R. T.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

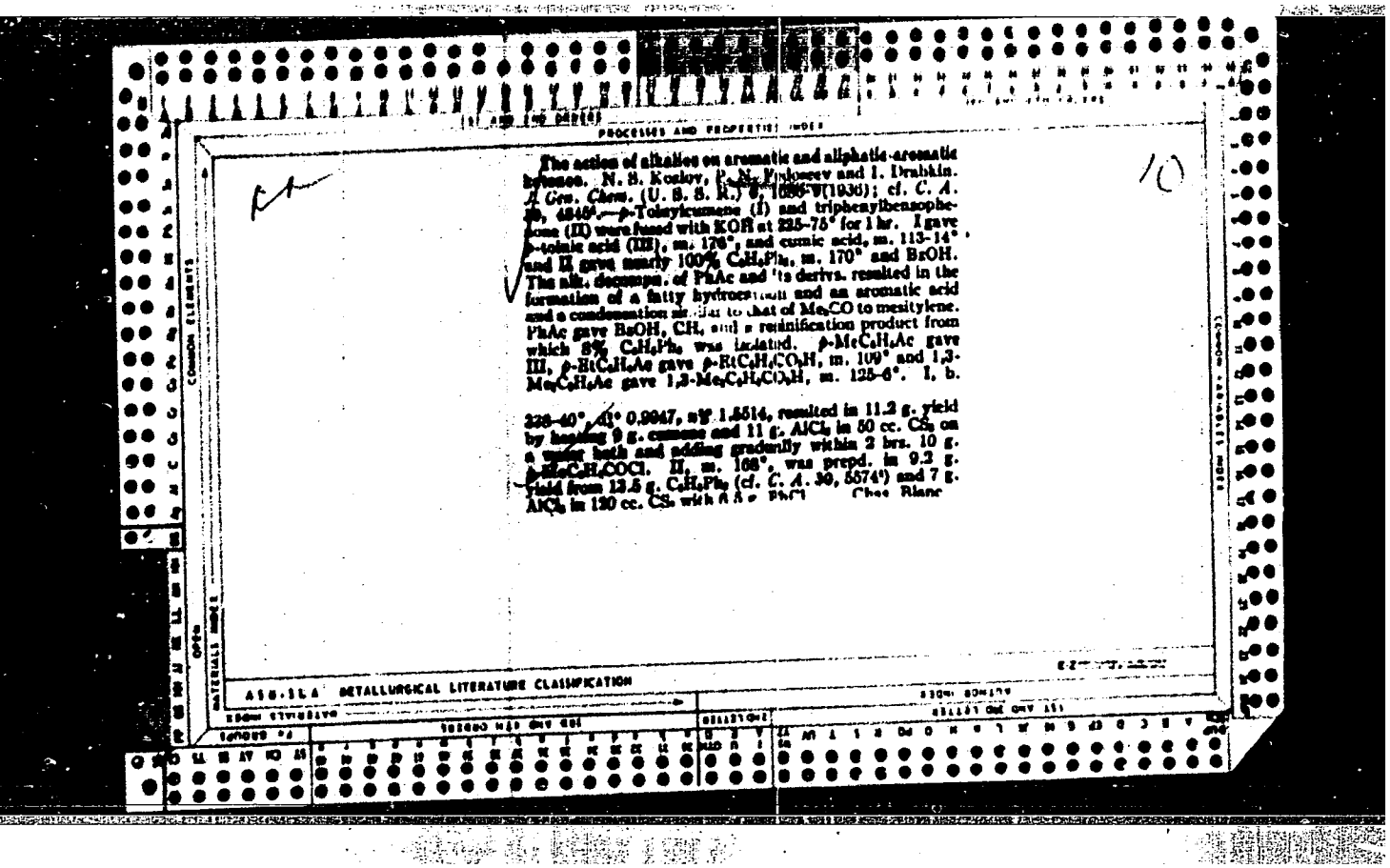
PROCESSES AND PROPERTIES INDEX

ca

10

Synthesis of toluic acids. N. S. Koslov, P. N. Pets-nov and V. S. Lazarev. *J. Gen. Chem.* (U. S. S. R.) 6, 485-9(1936).—The production of aromatic acids by alk. decompn. of ketones was studied. A mixt. of powd. KOH and a ketone in a Ni flask fitted with an upright condenser was heated in a metal bath at 260-70° for 45-55 min. 4-MeC_6H_4COPh (10 g.) with 25 g. KOH gave 87% *p*-toluic acid (I) contg. 3% BzOH, and some C_6H_6 (cf. Kollarits and Merts, *Ber.* 6, 540). 2,4-$Me_2C_6H_3COPh$ gave chiefly BzOH, $Me_2C_6H_3CO_2H$, m. 126°, and some C_6H_6 and PhMe. From 5 g. di-*p*-tolyl ketone and 15 g. KOH at 263-5° for 45 min. resulted 92% of pure I, m. 177-8° (cf. Ador and Krafts, *Ber.* 10, 2176). The work is being continued. Chas. Blanc

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION



The action of alkalies on aromatic and aliphatic-aromatic hydrocarbons. N. S. Kozlov, P. N. Pinkusevev and I. Drabkin. *J. Gen. Chem.* (U. S. S. R.) 6, 1686-9(1936); cf. *C. A.* 30, 4845⁶.—*p*-Tolylcumene (I) and triphenylbenzophenone (II) were fused with KOH at 225-75° for 1 hr. I gave *p*-toluic acid (III), m. 176°, and cumic acid, m. 113-14°, and II gave nearly 100% $C_6H_5Ph_3$, m. 170° and BzOH. The alk. decompn. of PhAc and its derivs. resulted in the formation of a fatty hydrocarbon and an aromatic acid and a condensation similar to that of Me_2CO to mesitylene. PhAc gave BzOH, CH, and a reunification product from which 8% $C_6H_5Ph_3$ was isolated. *p*-MeC_6H_4Ac gave III, *p*-EtC_6H_4Ac gave *p*-$EtC_6H_4CO_2H$, m. 109° and 1,3-$Me_2C_6H_4Ac$ gave 1,3-$Me_2C_6H_3CO_2H$, m. 125-6°. I, b. 228-40°, d_4^{15} 0.9047, n_D^{20} 1.5514, resulted in 11.2 g. yield by heating 9 g. cumene and 11 g. $AlCl_3$ in 50 cc. CS_2 on a water bath and adding gradually within 2 hrs. 10 g. *p*-MeC_6H_4COCl. II, m. 168°, was prepd. in 9.2 g. yield from 13.5 g. $C_6H_5Ph_3$ (*cf. C. A.* 30, 5574⁶) and 7 g. $AlCl_3$ in 120 cc. CS_2 with [illegible] PhCl. Chas. Blanc

PROCESSES AND PROPERTIES INDEX

CA

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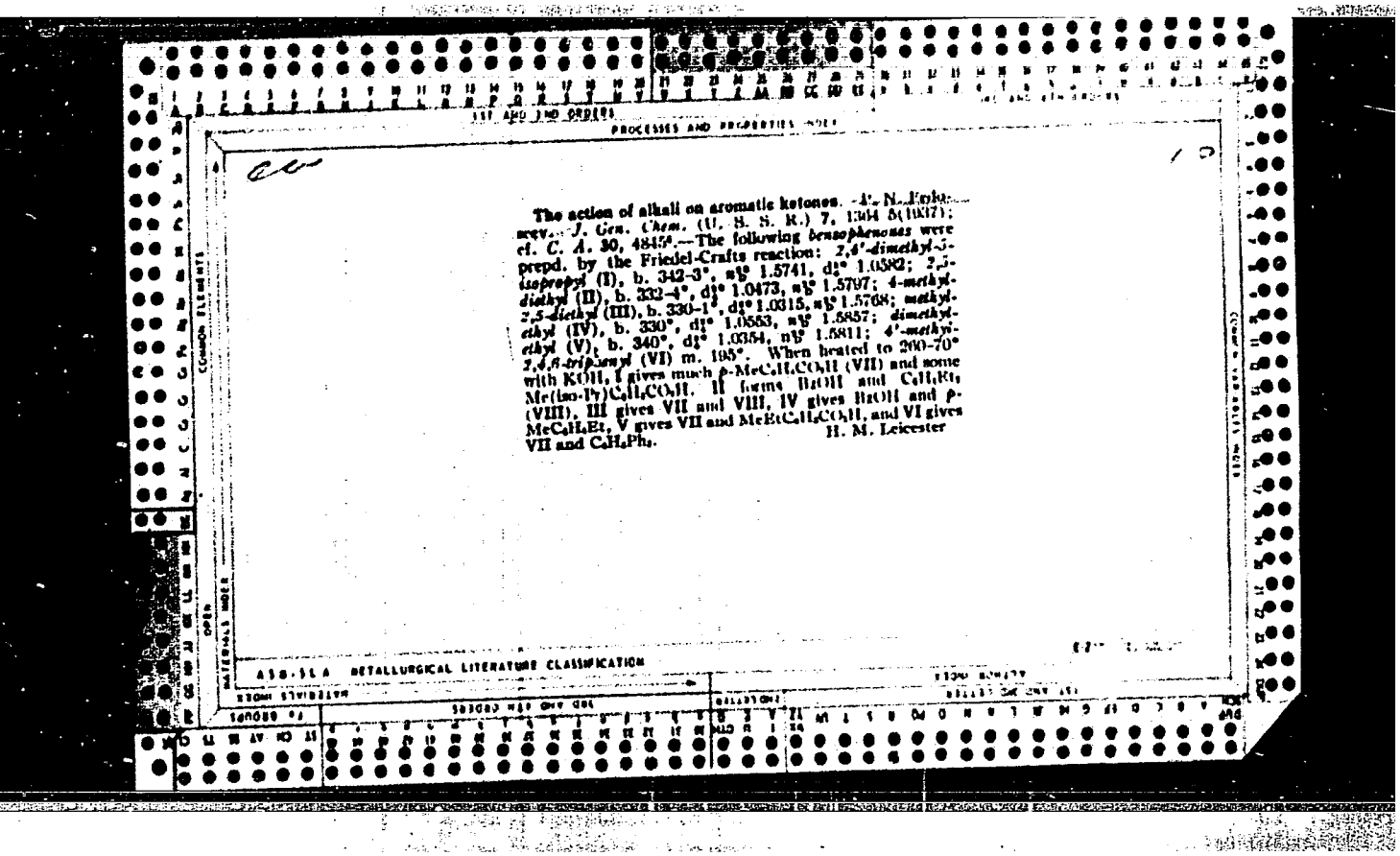
Catalytic condensation of acetylene with the esters of aminobenzoic acids. N. S. Koslov and P. N. Fedoseev. *J. Gen. Chem.* (U. S. S. R.) 7, 51-3(1937).—Condensation of p-$EtO_2CC_6H_4NH_2$ (I) and o-$MeO_2CC_6H_4NH_2$ (II) with C_2H_2 in alc. in the presence of $HgCl_2$ resulted chiefly in the formation of corresponding dimer bases of the type $(RN:CHMe)_2$ (cf. *C. A.* 30, 4864). I afforded *cis*- (III) and *trans*-p,p'-$EtO_2CC_6H_4NHCHMeCH:CHNHC_6H_4CO_2Et$, m. 168-9° and 184-5°, resp. These saponif. with alc. KOH gave the free acid, m. 208°. III on boiling gave Et p-quinaldinecarboxylate. The corresponding deriv. of II, m. 146°, is identical with the condensation product of II and AcH obtained by Mehner (*J. prakt. Chem.* [2], 63, 261(1854)). It is decompd. on heating into quinaldine, $PhNH_2$, CO_2 and H_2. **Catalytic condensation of acetylene with p-nitroaniline. New method of p-nitroquinaldine synthesis.** *Ibid.* 54-5; cf. *C. A.* 31, 1374[4].—Conducting C_2H_2 into p-$H_2NC_6H_4NO_2$ (I) in alc. in the presence of $HgCl_2$ resulted in a mixt. of stereoisomeric diethylidenenitroaniline bases (cf. Kibner, *Ann.* 318, 64(1901)), m. 196° and 231°, resp. Heating the mixt. in an oil bath gave p-nitroquinaldine (56% yield) and I.

Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



The action of alkali on aromatic ketones. A. N. Kost. rev. *J. Gen. Chem.* (U. S. S. R.) 7, 1304–5(1937); cf. *C. A.* 30, 4845⁹.—The following *benzophenones* were prepd. by the Friedel-Crafts reaction: *2,4'-dimethyl-5-isopropyl* (I), b. 342–3°, n_D^{18} 1.5741, d_4^{18} 1.0582; *2,5-diethyl* (II), b. 332–4°, d_4^{18} 1.0473, n_D^{18} 1.5797; *4-methyl-2,5-diethyl* (III), b. 330–1°, d_4^{18} 1.0315, n_D^{18} 1.5768; *methyl-ethyl* (IV), b. 330°, d_4^{18} 1.0563, n_D^{18} 1.5857; *dimethyl-ethyl* (V), b. 340°, d_4^{18} 1.0354, n_D^{18} 1.5811; *4'-methyl-2,4,6-triphenyl* (VI) m. 195°. When heated to 200–70° with KOH, I gives much *p*-MeC$_6$H$_4$CO$_2$H (VII) and some Me(iso-Pr)C$_6$H$_3$CO$_2$H. II forms BzOH and C$_6$H$_4$Et$_2$ (VIII), III gives VII and VIII, IV gives BzOH and *p*-MeC$_6$H$_4$Et, V gives VII and MeEtC$_6$H$_3$CO$_2$H, and VI gives VII and C$_6$H$_5$Ph.

H. M. Leicester

PROCESSES AND PROPERTIES INDEX

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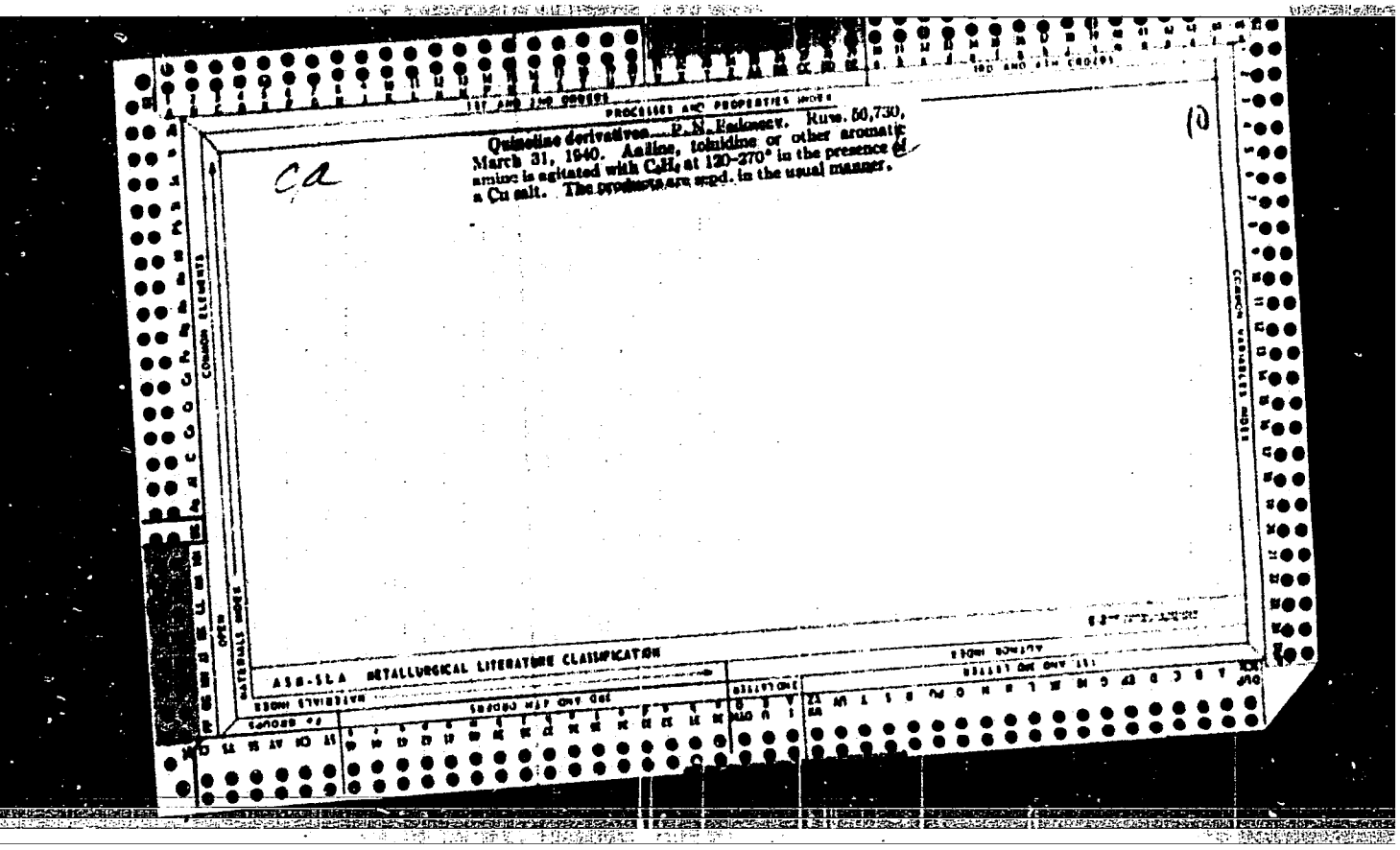
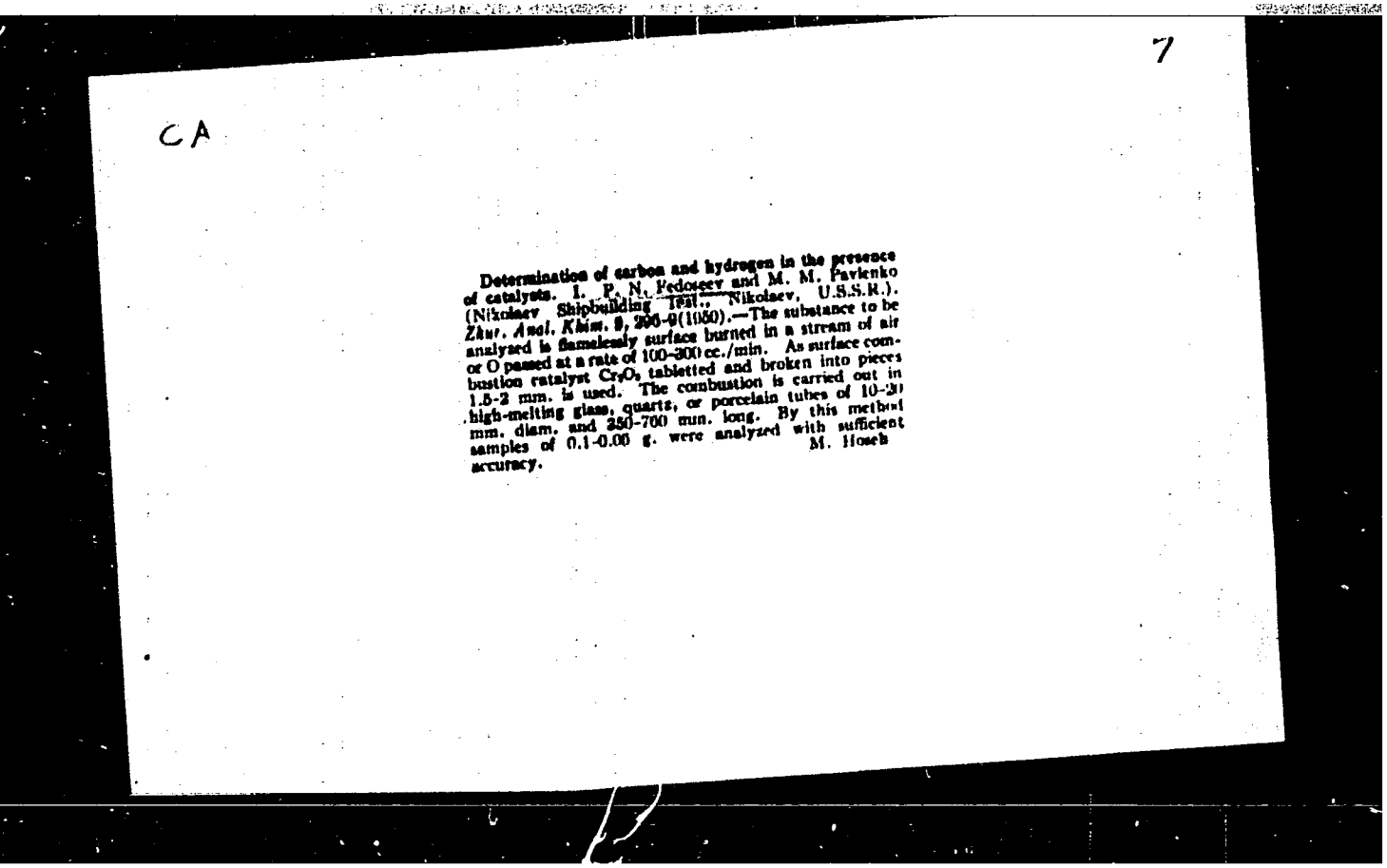
Alkaline hydrolysis of ketones. P. N. Fedorov. *Uchenye Zapiski Belorusskogo Gosudarst. Univ., Ser. Khim.* 1939, No. 1, 30-65; *Khim. Referat. Zhur.* 1940, No. 7, 20. —F. investigated the effect of alkalies on ketones of the benzophenone series (9 of these were newly synthesized by F.) and on a no. of acetophenols. The following conclusions are made on the basis of data found in the literature and of exptl. results obtained by F.: from the action of alkalies on ketones (except in cases such as condensation) carbinol is removed from the lighter part of the mol. Aromatic acids can be obtained in the pure state, owing to the ease with which the ketones can be prepd. and split off. The larger the no. of substituted radicals (alkyls) in the benzene nucleus of benzophenone, the easier the splitting off takes place. Introduction of an aliphatic radical into the benzophenone nucleus facilitates the transfer of the CO_2H group into the nucleus contg. this radical. A further effect of alkalies on ketones of the acetophenone series produces a rupture of the CO group with the formation of CH_4 and the corresponding acid. Simultaneously a condensation of the ketone takes place. This condensation is of the type of the formation of mesitylene from acetone. This can be utilized also for the production of other hydrocarbons. W. R. Henn

ASA-SLA METALLURGICAL LITERATURE CLASSIFICATION





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CA

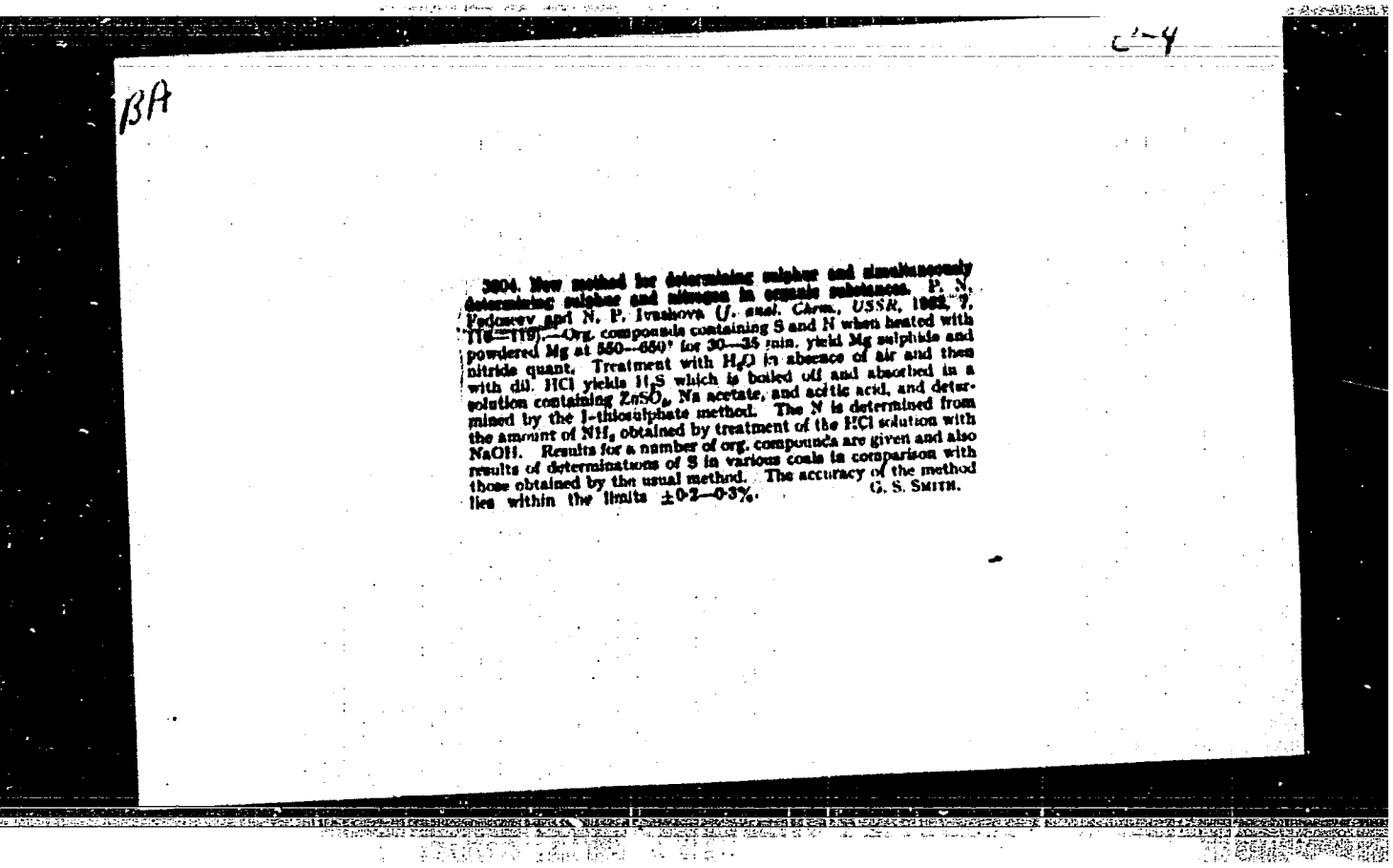
Determination of carbon and hydrogen in the presence of catalysts. I. P. N. Fedoseev and M. M. Pavlenko (Nikolaev Shipbuilding Inst., Nikolaev, U.S.S.R.). *Zhur. Anal. Khim.* 5, 290-9(1950).—The substance to be analyzed is flamelessly surface burned in a stream of air or O passed at a rate of 100-300 cc./min. As surface combustion catalyst Cr_2O_3 tabletted and broken into pieces 1.5-2 mm. is used. The combustion is carried out in high-melting glass, quartz, or porcelain tubes of 10-30 mm. diam. and 350-700 mm. long. By this method samples of 0.1-0.00 g. were analyzed with sufficient accuracy.

M. Hosek

BA

C 4

[illegible]. Determination of carbon and hydrogen in nitrogen-containing organic substances in presence of surface-combustion catalysts. [illegible] F. M. [illegible] and M. M. Pavlenko (*J. anal. Chem., USSR*, 1961, 6, 317—[illegible]; cf. C., 1961, [illegible]).—Combustion occurs in a tube containing Cr_2O_3 at [illegible]° in a stream of O_2. The products are passed through absorption vessels containing anhyd. $CaCl_2$, an oxidising mixture for removing oxides of N (0·1—0·5% $KMnO_4$ in conc. H_2SO_4), a saturated solution of $FeSO_4$ in 20—25% H_2SO_4 for removing volatile higher oxides of Mn (or of Cr if $K_2Cr_2O_7$ has been used in place of $KMnO_4$), anhyd. $CaCl_2$ to remove water picked up from the 20—25% H_2SO_4, and then solid KOH. The time taken is 10—[illegible] min.; the errors do not exceed ±0·3% for C and ±0·2% for H, and the method is much simpler than the usual method for C and H. G. S. Smith.



BA

C-4

3904. New method for determining sulphur and simultaneously determining sulphur and nitrogen in organic substances. P. N. Fedoseev and N. P. Ivashova *Ukr. anal. Chem., USSR*, 1952, 7, 116—119).—Org. compounds containing S and N when heated with powdered Mg at 550—650° for 30—35 min. yield Mg sulphide and nitride quant. Treatment with H_2O in absence of air and then with dil. HCl yields H_2S which is boiled off and absorbed in a solution containing $ZnSO_4$, Na acetate, and acetic acid, and determined by the I-thiosulphate method. The N is determined from the amount of NH_3 obtained by treatment of the HCl solution with NaOH. Results for a number of org. compounds are given and also results of determinations of S in various coals in comparison with those obtained by the usual method. The accuracy of the method lies within the limits ±0·2—0·3%. G. S. SMITH.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
Analytical Chemistry

(2) Chem

New method for determining nitrogen in organic substances. V. P. N. Fedoseev and N. P. Ivashova. *J. Anal. Chem.* (U.S.S.R.) 7, 129–32(1952)(Engl. translation).—See *C.A.* 47, 1538*f*.
H. L. H.

9-2-54

FEDOSEYEV, P.N. (g. Nikolayev).

Simplified electrodes for the demonstration of electric conductivity of solutions. Khim. v shkole no.3:62-63 My-Je '53. (MLRA 6:7)
(Electrodes)

FEDOSEYEV, P.N., dotsent (g. Nikolayev).

Attachment to an electric plate for heating test tubes. Khim.v shkole no.6:60-61 N-D '53. (MLRA 6:11)

(Laboratories--Apparatus and supplies)

FEDOSEYEV, P.N.

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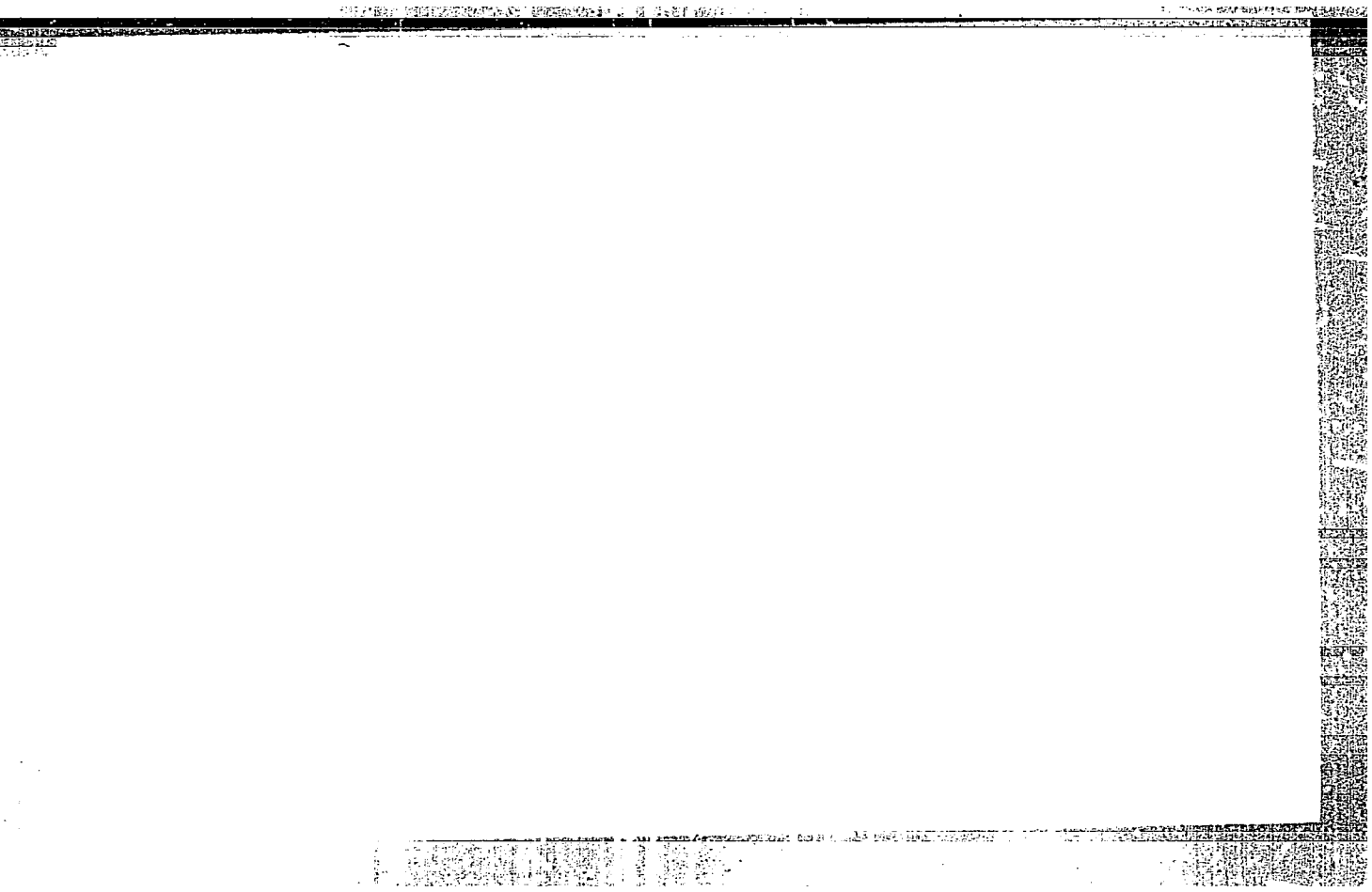
Jan. 1954
Organic Analysis

V 90. Determination of carbon and hydrogen in organic substances containing sulphur and nitrogen in presence of catalysts. III. P. N. Fedoseev and M. M. Pavlenko (*J. Anal. Chem., U.S.S.R.*, 1953, 8, 158–162).—The authors' method (*Brit. Abstr. C*, 1951, 33 and 1952, 83) for determining C and H is extended to cover the analysis of organic substances containing S and halogens in addition to C, H, O, and N. Removal of S oxides and halogens is attained by the use of metallic Ag at 650° to 750°C.
G. S. SMITH

5-21-54 maf

Shipbuilding Inst., Nikolayevsk.



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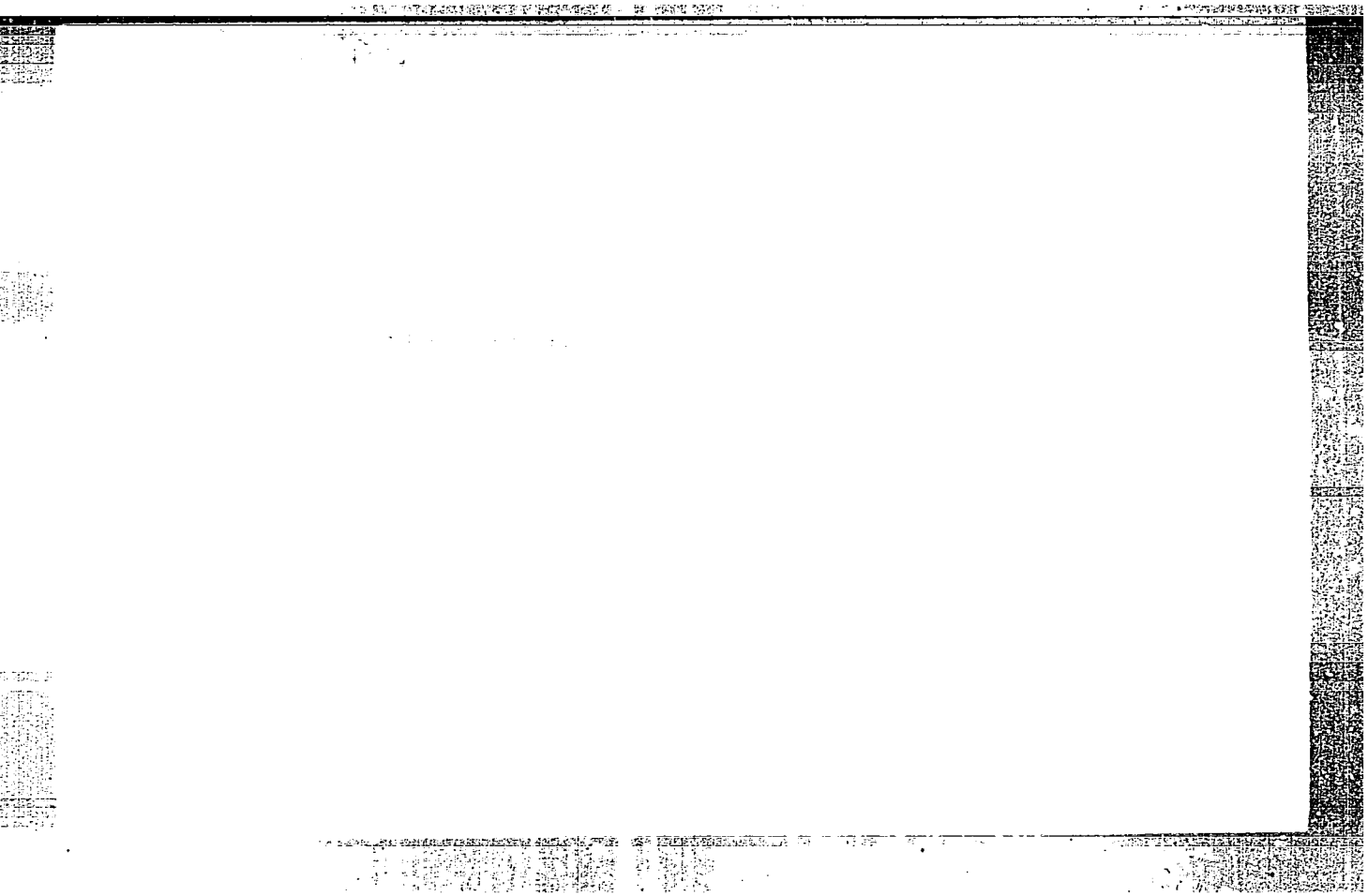
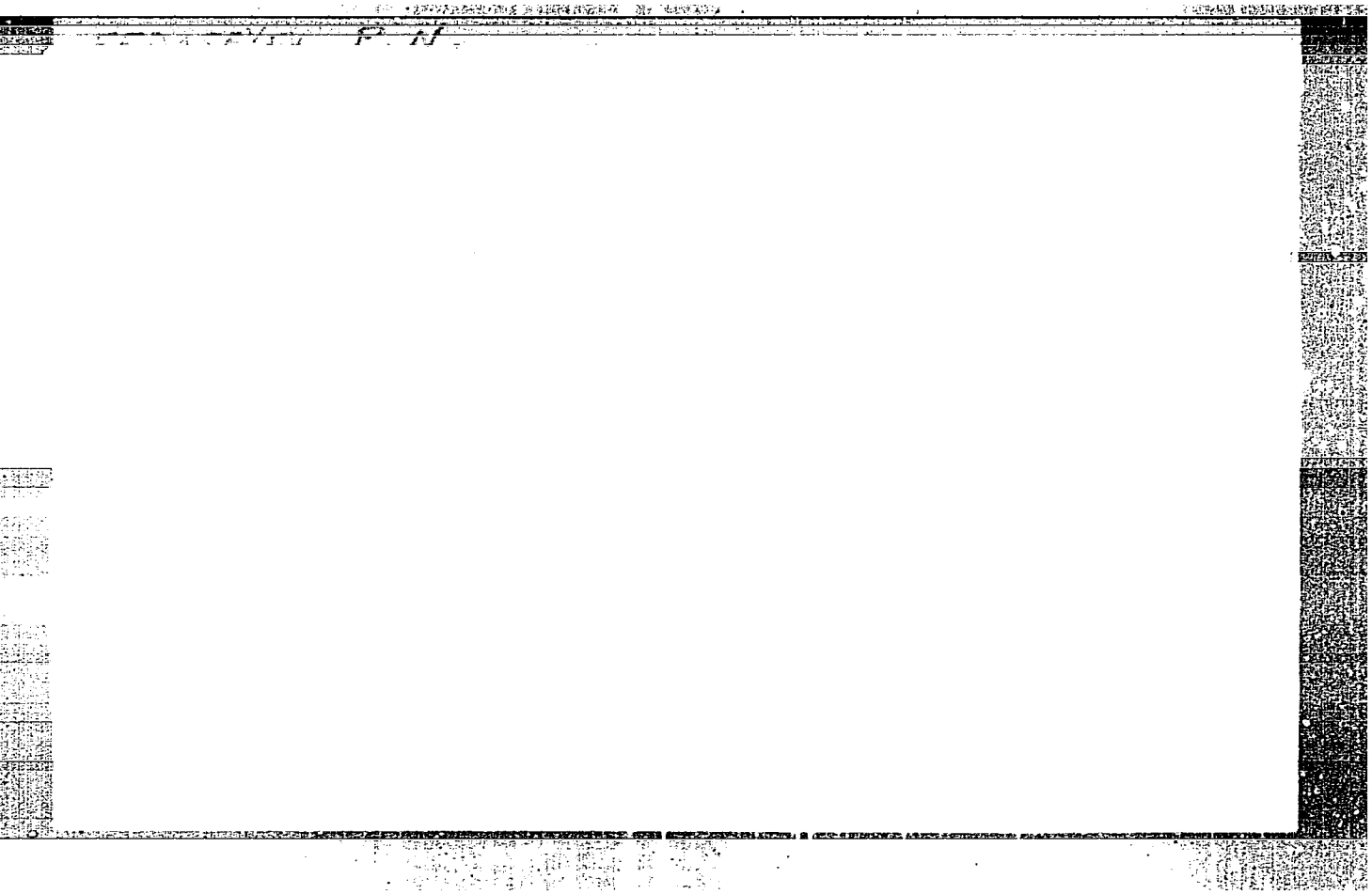
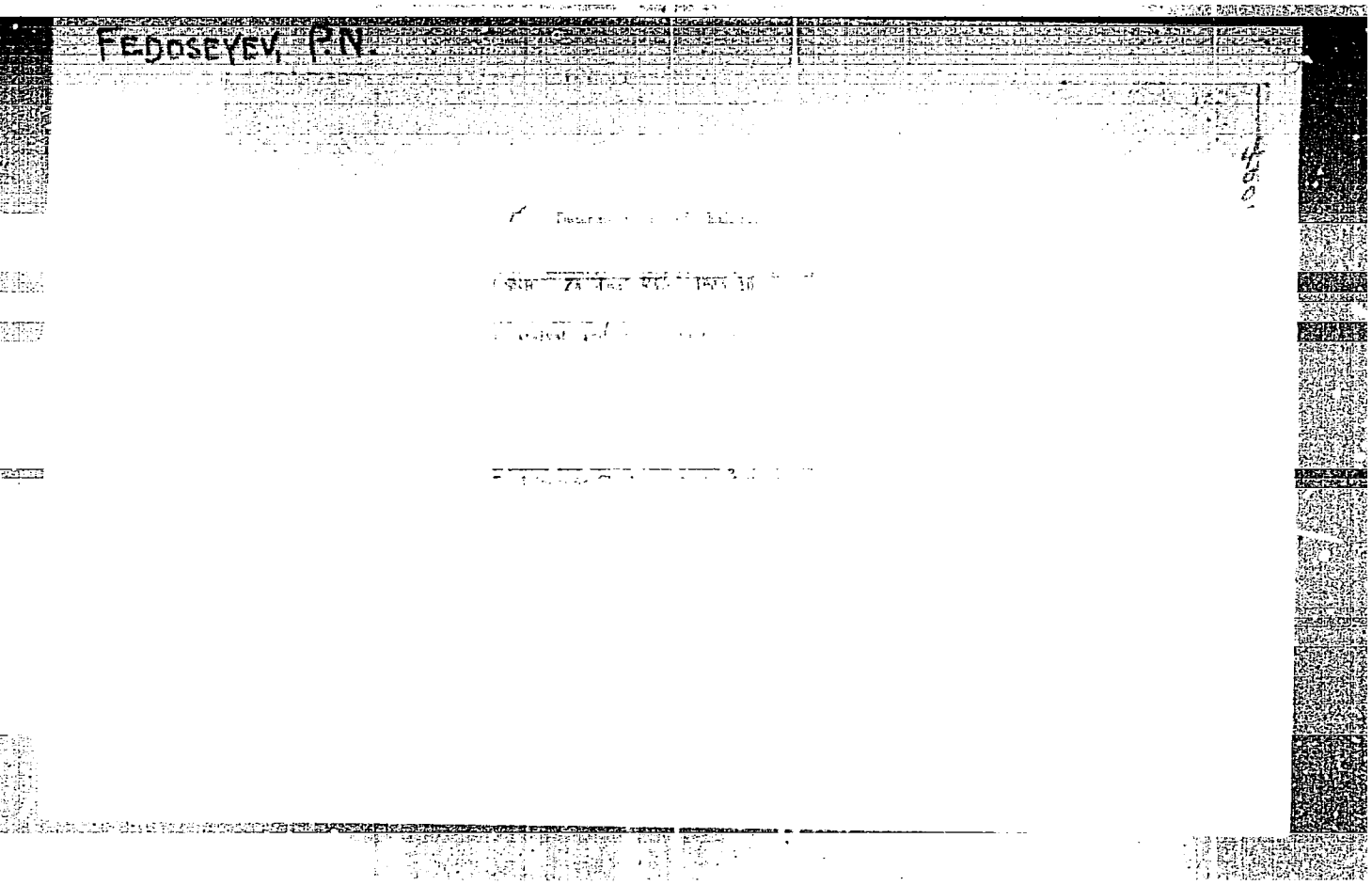




APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041272(

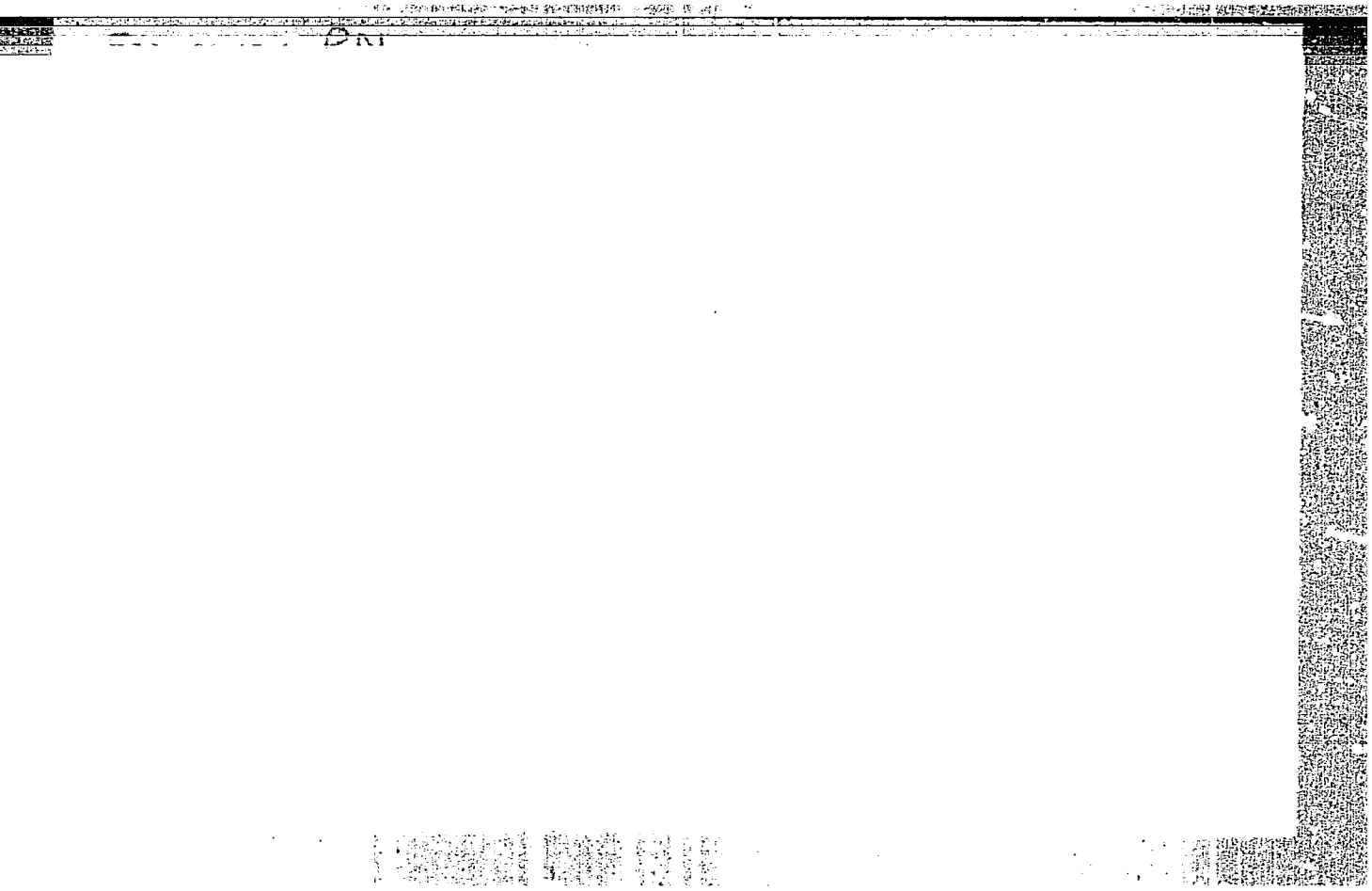
FEDOSEYEV, P.N. (gorod Nikolayev)

Simple apparatus for chemical experiments. Khim.v shkole 10 no.2: 47-48 Mr-Ap '55. (MLRA 8:7)
(Chemical apparatus)



FEDOSEYEV, P.N. (g.Nikolayev); LAGOSHNAYA, R.M. (g. Nikolayev).

Chemist's "garden." Khim. v shkole 10 no.6:59-61 N-D '55.
(Chemistry - Experiments) (MLRA 9:1)



FEDOSEYEV, P.N. Doc Chem Sci (diss) "New methods for quantitative determination of carbon, hydrogen, nitrogen, sulfur, chlorine, bromine and iodine in some organic substances." Mos, 1957 22pp 22 cm. (Mos State Univ im M.V. Lomonosov) 100 copies (KL, 12-57, 103)

FEDOSEYEV, P.N.

USSR/General Problems. A-

Abs Jour : Ref Zhur - Khimiya, No 10, 1957, 33426

Author : Fedoseyev, P.N., Lagoshnaya, P.M.
Inst :
Title : Surface Conbustion Without a Flame.

Orig Pub : Khimiya v Shkole, 1957, No 1, 12-15.

Abstract : A popular account of information on the process and instructions for demonstration experiments, are given.

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FEDOSEYEV, P.N.; IGNATENKO, L.S.

New vacuum method for quantitative determination of carbon and hydrogen in organic substances. Izv.AN Turk.S.S.R. no.3:24-30 '57. (MIRA 10:10)

1. Institut khimii Akademii nauk Turkmenskoy SSR.
(Carbon) (Hydrogen)

FEDOSEYEV, P.N.; IGNATENKO, L.S.

New method for quantitative determination of nitrogen in organic substances by decomposing them in a vacuum. Izv.AN Turk.SSR no.4:13-18 '57. (MIRA 10:10)

1. Institut khimii AN Turkmenskoy SSR.
(Vacuum apparatus) (Organic matter--Analysis) (Nitrogen)

FEDOSEYEV, P.N.; IGANTENKO, L.S.

Vacuum method for quantitative determination of carbon and hydrogen in organic substances containing sulfur and halogens. Izv. AN Turk. SSR no.6:84-89 '57. (MIRA 11:1)

1. Institut khimii AN Turkmenskoy SSR.
(Chemistry, Analytical--Quantitative) (Vacuum apparatus)
(Carbon) (Hydrogen)

5(3) SOV/153-58-5-6/28

AUTHORS: Fedoseyev, P. N., Ignatenko, L. S., Chernysheva, T. Ye.

TITLE: On the Combustion Methods of Highly Volatile Substances in Quantitative Elementary Analysis (O sposobakh sozhzheniya legkoletuchikh veshchestv v kolichestvennom organicheskom elementarnom analize)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1958, Nr 5, pp 42-45 (USSR)

ABSTRACT: The combustion of highly volatile and rapidly decomposable substances forms a complex problem. The authors criticize the individual methods suggested by various scientists (Refs 1- 12).

The two authors mentioned first devised methods of quantitatively determining carbon, hydrogen, and nitrogen using a vacuum (Refs 13-16) in organic substances. It does not need any expensive apparatus; the methods are simple, accessible, reliable and sufficiently accurate. Highly volatile substances can be burnt without noticeable losses. The weighed portion of a highly volatile liquid in a sealed glass ampoule is first put into a special copper shell (Fig 1). The two halves of the shell can easily be telescoped and have openings. The shell containing the ampoule is introduced into the combustion tube

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On the Combustion Methods of Highly Volatile Substances in Quantitative Elementary Analysis

and the ampoule is crushed by shoving together the two halves. Figure 2 shows the device used. After the analysis had been finished the shell together with the splinters of the ampoule is removed from the combustion tube. Table (p 44) shows the results of the analyses of benzene, isooctane, n-heptane, hexane, cyclohexane, and cyclohexanone according to the method recommended. A. P. Terent'yev suggested new devices (steel springs etc.) for crushing the ampoule (Fig 3). This method was tested at the laboratory of the authors, who found it to work well. There are 3 figures, 1 table, and 16 references, 8 of which are Soviet.

ASSOCIATION: Institut khimii AN Turkm. SSR i Nikolayevskiy korablestroitel'nyy institut, Kafedra khimii (Institute of Chemistry, AS Turkmenskaya SSR, and Nikolayev Ship-Building Institute, Chair of Chemistry)

FEDOSEYEV, P. N.

AUTHOR: Fedoseyev, P. N. 75-1-21/26

TITLE: The Absorption of Sulfur Oxides by Silicates (Pogloshcheniye okislov sery silikatami)

PERIODICAL: Zhurnal Analiticheskoy Khimii, 1958, Vol 13, Nr 1, pp. 123 - 126 (USSR)

ABSTRACT: In organic elementary analysis lead chromate, lead dioxide or metallic silver are used for the absorption of sulfur oxides which are produced in the combustion of organic substances. Lead dioxide has many deficiencies and is only rarely used now, lead chromate corrodes the quartz tubes at high temperatures and metallic silver is expensive and may also corrode the quartz tubes at temperatures of 700-900°C. In an earlier paper the author showed that sodium or potassium silicate can be used instead of silver. In the present paper the absorptive power of other silicates is investigated. For quantitative analysis the silicate must not be easily fusible, neither absorb CO_2 nor water vapor and must absorb the sulfur oxides rapidly and quantitatively. It must not corrode the quartz tubes. The sulfate produced in the

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absorption of the sulfur oxides must be stable at high temperatures (700-800°C). Experiments showed that the silicates of sodium and potassium absorb water vapor from the air and moreover corrode the quartz tubes. Lead silicate has a low melting point. Magnesium silicate possesses only a weak absorptive power for sulfur oxides It was found that the absorptive power of the investigated silicates markedly decreases with a decrease in temperature. The quantitative absorption of the sulfur oxides by silicates depends on 2 factors: 1. on the rapid absorption of sulfur trioxide and 2. on the displacement of the equilibrium to the side of the formation of sulfur trioxide to the extent as it is bound by the silicate: $SO_3 + BaSiO_3 \rightleftarrows BaSO_4 + SiO_2$; and $2SO_2 + O_2 \rightleftarrows 2SO_3$ respectively. The sulfur are also fairly well absorbed by lead chromate, but much less than by the silicates of barium, calcium, strontium and cadmium. Nitrogen oxides are badly absorbed by the investigated silicates at low temperatures (350°-500°). On an increase in temperature

to 600 - 700°C a dissociation of the nitrogen dioxide in NO and oxygen takes place. The opposite reaction of the formation of nitrogen dioxide takes place very slowly on a decrease in temperature. Therefore silicates are not situated for absorbing nitrogen oxides. By the absorption of halogen by silicates, chlorides are produced which can tear loose at high temperatures and in the case of a powerful oxygen current and which thereby falsify the results of analysis. The silicates, however, deserve great interest in the analysis of sulfur-conteining compounds. It was found that due to the rapid and good absorption of sulfur oxides by the silicates of strontium, calcium, barium and cadmium, these silicates can be used for the simultaneous quantitative determination of carbon, hydrogen and sulfur in a single weighed portion of the substance to be analyzed. For collecting the sulfur oxides 2 shuttles, filled with silicate are introduced into the front part of the absorption tube. Due to the small surface of the shuttles the analysis can only be carried out at not too rapid velocities of the oxygen current. It is expedient to use tubes with a large diameter. Conclusions: Sulfur oxides are quantitatively

The Absorption of Sulfur Oxides by Silicates 75-1-21/26

absorbed by the silicates of calcium, strontium, barium at 700-800° C. These silicates are weakly hygroscopic. They do not corrode quartz tubes at 700-800° C. There follows an experimental part in which the corresponding experiments are described in detail. The investigations are continued. There are 4 tables and 2 references, 2 of which are Slavic.

ASSOCIATION: Ship-building Institute imeni S. O. Makarov, Nikolayev (Nikolayevskiy korablestroitel'nyy institut im. S. O. Makarova)

SUBMITTED: February 29, 1953

AVAILABLE: Library of Congress

1. Silicates - Absorptive properties 2. Sulfur oxides - Absorption

Card 4/4

AUTHORS: Fedoseyev, P. N., Ivashova, N. P. 75-13-2-14/27

TITLE: New Methods for the Quantitative Determination of Nitrogen and Halogens and also of Nitrogen, Sulfur, and Halogens in a Weighed Portion of an Organic Substance (Novyye metody kolichestvennogo opredeleniya azota i galogenov, a takzhe azota, sery i galogenov v odnoy navoske organicheskogo veshchestva). Communication IV (Soobshcheniye IV)

PERIODICAL: Zhurnal Analiticheskoy Khimii, 1958, Vol. 13, Nr 2, pp. 230-234 (USSR)

ABSTRACT: In previous papers (References 1,2) the authors referred to the fact that in the heating of nitrogen-, sulfur-, and halogen-containing organic compounds with magnesium powder to temperatures of 550-650° magnesium nitrides, -sulfides, halogenides are formed quantitatively. In this article a method is described, which allows the simultaneous determination of 2 or 3 of these elements from a weighed portion of the organic compound. Besides a reference is made on the possibility of the simultaneous determination of sulfur and nitrogen in various coal brands by this method. Instead of hydrogen, which before was used by the authors for

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the removal of air from the reaction container, also diethyl-ether can be used (after the suggestion by A. P. Terentyev). By this the determination is considerably simplified.
In case of the simultaneous determination of nitrogen and halogens from a weighed portion of the organic substance the sample, which has to be analyzed, is mixed with magnesium powder. After addition of ether it is heated up to 40-50°C in a water bath. Then some more magnesium powder and ether are added and the container is closed by a plug, from which a rubber tube for the drainage of the gases is lead under a reversedly mounted cylinder, which is filled with water. Then heating is performed up to the necessary temperature (ref. 1). After the cooling the reaction container together with the contents is pulverized in a mortar and quantitatively transferred into a distilling flask. The air is expelled from the flask by carbon dioxide, then the reaction mass is worked up by 40% sulfuric acid, until all of the magnesium is dissolved. Then an alkalization is conducted with 50% potash lye and the ammonia is distilled off. For the absorption of ammonia a solution of acid potassium iodate is well suited (Ref. 3).

New Methods for the Quantitative Determination of Nitrogen and Halogens and also of Nitrogen, Sulfur, and Halogens in a Weighed Portion of an Organic Substance. Communication IV 75-13-2-14/27

Nitrogen is determined iodometrically. To the residue in the distilling flask 40% sulfuric acid is added until the precipitate of $Mg(OH)_2$ is completely dissolved, then the substance is filtered and the filter is washed carefully with water. The washing liquids are combined with the filtrate. From the filtrate the percentage of halogens is determined argentometrically.

In case of the simultaneous determination of nitrogen, sulfur, and halogens from a weighed portion of the organic substance it is proceeded as described above, just after the acidification of the crushed reaction mass in the distilling flask first the hydrogen disulfide is distilled off from the acid solution and determined iodometrically after the absorption. The residue in the flask is alkalized by 50% potash lye and treated as described above. The described method is sufficiently reliable and simple and demands for the performance neither complicated devices nor expensive reagents. Therefore it can be applied with advantage in various laboratories.

Card 3/4 The analysis results for a number of compounds, which were

New Methods for the Quantitative Determination of Nitrogen and Halogens and also of Nitrogen, Sulfur, and Halogens in a Weighed Portion of an Organic Substance. Communication IV 75-13-2-14/27

analized after this method, are given exactly. Among them are also various coal samples, for the analysis of which the described method is very well applicable.
There are 3 tables and 4 references, 3 of which are Soviet.

ASSOCIATION: Nikolayevskiy korablestroitel'nyy institut im. S. O. Makarova (Nikolayev Ship Building Institute imeni S. O. Makarov)

SUBMITTED: June 29, 1953

1. Organic materials--Quantitative analysis 2. Nitrogen--Determination
3. Halogen--Determination 4. Sulfur--Determination

Card 4/4

AUTHORS: Terent'yev, A. P., Fedoseyev, P. N., Ivasheva, N. P. 75-13-3-17/27

TITLE: New Methods of the Quantitative Determination of Nitrogen, Sulfur and Halogens From a Single Weighed Portion of Organic Substance (Novyye metody kolichestvennogo opredeleniya azota, sery i galogenov iz odnoy naveski organicheskogo veshchestva).
Communication 4. The Use of Calcium for the Decomposition of the Substance (Soobshcheniye 4. Primeneniye kal'tsiya dlya razlozheniya veshchestva)

PERIODICAL: Zhurnal analiticheskoy khimii, 1958, Vol 13, Nr 3, pp 344-348 (USSR)

ABSTRACT: In earlier papers the authors showed that nitrogen, sulfur and halogens in organic substances can be quantitatively determined by means of powdered metallic magnesium (Reference 1). This method has several disadvantages. The reaction mass has to be prepared with acid, which may lead to the formation of explosive mixtures of silicon hydrides, hydrogen and air. Therefore the decomposition is performed

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in the atmosphere of an inert gas. In order to remove the shortcomings of this method and to simplify the determination, the authors used powdery calcium instead of magnesium. It reacts with water already at the usual temperature and combines with oxygen, nitrogen, sulfur and halogens. In contrast to magnesium, calcium does not react with glass at temperatures of 700-750°C, besides the melting and boiling points are higher than those of magnesium. The principle of the new method consists in the fact that a weighed portion of the organic substance to be analyzed which contains nitrogen, sulfur and halogens is treated with powdery calcium at 700-750°C in an atmosphere of ether vapor or hydrogen. On this occasion calcium-nitride, -sulfide and -halogenide form in which nitrogen, sulfur and halogens are quantitatively determined. In the present paper two apparatus suitable for the performance of this determination are drawn and described in detail. The air must before

New Methods of the Quantitative Determination of Nitrogen, Sulfur and Halogens From a Single Weighed Portion of Organic Substance. Communication 4. The Use of Calcium for the Decomposition of the Substance

75-13-3-17/27

the determination be removed from all parts of the apparatus by means of ether vapor. The performance of the decomposition of the organic substance by means of calcium is described in detail. After the decomposition product nitrogen is removed, as ammonia with water or 30% ethanol, and acidimetrically determined. After acidification of the reaction product after the decomposition with calcium sulfur is expelled as hydrogen sulfide and iodimetrically titrated. The halogens finally are determined by preparing the reaction mixture with diluted nitric acid and subsequent argentometric titration. The performance of these determinations is exactly described, too. Thus one, two or all three of the above-mentioned elements can be quantitavely determined from one weighed portion (the respective varieties of the method are described in detail). By using calcium instead of magnesium for the decomposition

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New Methods of the Quantitative Determination of Nitrogen, Sulfur and Halogens From a Single Weighed Portion of Organic Substance. Communication 4. The Use of Calcium for the Decomposition of the Substance

75-13-3-17/27

of the organic substance the analysis is simplified and the duration of its performance shortened. A number of organic substances were analyzed by this new method; the results of 26 of these analyses are given in the paper. There are 2 figures, 1 table and 4 references, 2 of which are Soviet.

ASSOCIATION: Nikolayevskiy korablestroitel'nyy institut i Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Nikolayev Ship-Building Institute and Moscow State University imeni M. V. Lomonosov)

SUBMITTED: December 2o, 1956

1. Calcium--Applications 2. Organic materials--Chemical analysis

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FEDOSEYEV, P.N. (g.Nikolayev)

Quantitative determination of air composition. Khim. v shkole 13 no.5:60-62 S-O '58. (MIRA 11:9)
(Air--Analysis)

AUTHORS: Fedoseyev, P. N., Sobko, M. Ya. SOV/75-13-5-17/24

TITLE: New Methods of Quantitative Determination of Halogens in Organic Substances (Novyye metody kolichestvennogo opredeleniya galogenov v organicheskikh veshchestvakh) II. Gravimetric Determination of Chlorine, Bromine and Iodine (II. Vesovyye opredeleniya khlora, broma i yoda)

PERIODICAL: Zhurnal analiticheskoy khimii, 1958, Vol 13, Nr 5, pp 595-598 (USSR)

ABSTRACT: In a previous paper (Ref 1) the authors had described a new quantitative volumetric method for the determination of chlorine, bromine and iodine in organic compounds. In the present paper a new gravimetric method of determination is described for each of the above elements without use of silver salts. This new method is based on the different chemical reactivity of the halogens. The organic substance is decomposed according to one of the methods described in literature, for instance by combustion in oxygen- or air-stream. The gaseous products of reaction which contain the free halogens and the hydrohalic acids, are passed through 2 heatable tubes the first of which is charged with fine crystalline potassium bromide and the

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New Methods of Quantitative Determination of Halogens in Organic Substances. II. Gravimetric Determination of Chlorine, Bromine and Iodine

second with fine crystalline potassium iodide. In the first tube the bromide ions are oxidized by the free chlorine, in the second tube the free bromine oxidizes the iodide ions. In a third tube containing moist potassium iodide the separated iodine is quantitatively bound. This tube is connected with an apparatus according to Winkler (Vinkler) which is filled with a 10% KJ solution to take up traces of iodine that are carried along by the oxygen stream. From the change of weight in the first two tubes the percentage content of chlorine and bromine of the initial substance is calculated. The content of iodine can be computed from the difference of the total amount of iodine which was condensed on the third tube and absorbed in the Winkler apparatus and of the amounts of chlorine and bromine, determined from the change of weight in the first two tubes. Thus, by one weighing of the organic compound at the same time chlorine, bromine and iodine can be separately determined. In a future paper the simultaneous quantitative determination of 2 or 3 halogens by one weighing of the organic substance will be described. A figure shows the installation used for the

New Methods of Quantitative Determination of Halogens in Organic Substances. II. Gravimetric Determination of Chlorine, Bromine and Iodine

described determination. In the experimental section the determination as well as the calculation of the percentage contents of the various halogens are described in detail. Also the results of some determinations performed according to this method are given. The method in question is simple and requires neither a complicated installation nor expensive reagents. The technique is neither complicated. The error of the determination does not exceed $\pm$ 0,1% - 0,2%. The analysis takes 40 - 50 minutes. The determination of chlorine offers a simultaneous threefold control, the determination of bromine a double control of the accuracy of the analysis. Sulfur interferes with the determination.
There are 1 figure, 2 tables, and 4 references, 4 of which are Soviet.

ASSOCIATION: Nikolayevskiy korablestroitel'nyy institut im. S. O. Makarova (Nikolayev Ship-Building Institute imeni S. O. Makarov)

5(3)
AUTHORS: Fedoseyev, P. N., Sobko, M. Ya. SOV/75-13-6-17/21

TITLE: Method for the Quantitative Determination of Halogens in Organic Substances (Metod kolichestvennogo opredeleniya galogenov v organicheskikh veshchestvakh) Communication 3. Simultaneous Separate Gravimetric Determinations of Chlorine, Bromine and Iodine (Two and Three Elements Each) of a Weighed Portion of the Substance (Soobshcheniye 3. Vesovyye odnovremennyye razdel'nyye opredeleniya khlora, broma i yoda po dva i po tri elementa iz odnoy naveski veshchestva)

PERIODICAL: Zhurnal analiticheskoy khimii, 1958, Vol 13, Nr 6, pp 702-705 (USSR)

ABSTRACT: The known methods for the simultaneous separate determination of halogens are long and difficult to carry out (Ref 2). A method is described in the present paper, basing on the less reactive halogens displacing the more reactive ones from potassium and sodium bromide and potassium iodide. At room temperature and in the absence of water, this mutual displacement of halogens does not take place. The authors ascertained that the halogens capability of displacing one another from their metallic salts rapidly increases with

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increasing temperature. These reactions are already quantitative at 680-720° for potassium and sodium bromide, and for potassium iodide at 480-520°. Higher temperatures are not desiderable, as bromides then begin melting, while a noticeable decomposition of the iodides takes place. An illustration and an accurate description are given of an appliance that can be conveniently used for the above determination method. The sample is weighed into a boat then powdered with pounded quartz sand or chromium oxide and subsequently vaporized or burned in an electrically heated quartz tube at 750-800°. The resulting products are conveyed by the aid of a uniform current of pure dry oxygen through an 800-900° heated zone of the quartz tube to reach 2 small accurately weighed absorption tubes the first of which is filled with 30-35 g of potassium or sodium bromide and the second with an equal amount of potassium iodide. In the first absorption tube the temperature is 680-720°, and 480-520° in the other. A thin small tube follows the two heated absorption tubes and is filled with moist KJ. Finally, a Winkler absorption

Method for the Quantitative Determination of Halogens in Organic Substances. Communication 3. Simultaneous Separate Gravimetric Determination of Chlorine, Bromine and Iodine (Two and Three Elements Each) of a Weighed Portion of the Substance

SOV/75-13-6-17/21

apparatus with a 10% potassium iodide solution is linked to them. After combustion is completed, the two absorption tubes are accurately weighed out. The contents of both the thin tube and the Winkler apparatus are shifted over to a flask quantitatively and are titrated with a sodium thiosulfate solution. The chlorine and bromine contents are calculated from the change in weight of the two absorption tubes and the iodine content results from titration of iodine separated in both the thin tube and the Winkler apparatus. By one filling of the absorption tubes it is possible to carry out 30-50 determinations, if the weighed portion of the sample amounts to 0.1-0.05 g. The absorption tubes consist of quartz or high-melting glass and are linked to each other by rubber tubes. The formula for the percentage calculation of chlorine, bromine, and iodine in all possible cases of the presence of 2 or all of 3 elements each are given. This new method is simple,

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reliable, quick and accurate and does not require any expensive or complex equipment. The determination error amounts to 0.1 - 0.2 %. The analysis takes 50-60 minutes. There are 1 figure, 1 table, and 2 Soviet references.

ASSOCIATION: Nikolayevskiy korablestroitel'nyy institut imeni S. O. Makarova (Institute of Ship-Building imeni S. O. Makarov, Nikolayev)

SUBMITTED: April 19, 1955

FEDOSEYEV, P.N.; IGNATENKO, L.S.

Microanalysis methods for the determination of carbon, hydrogen, and nitrogen in organic compounds with the aid of a vacuum. Izv. AN Turk. SSR. no.1:45-52 '59. (MIRA 12:5)

1.Institut khimii AN Turkmenskoy SSR.
(Carbon--Analysis) (Hydrogen--Analysis)
(Nitrogen--Analysis)

5(2,3)

AUTHORS: Terent'yev, A. P., Fedoseyev, P. N., Ivashova, N. P.

SOV/153-2-1-11/25

TITLE: The Employment of Alkaline-earth Metals in Organic Elemental Analysis (Primeneniye shchelochno-zemel'nykh metallov v organicheskom elementarnom analize)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedéniy. Khimiya i khimicheskaya tekhnologiya, 1959, Vol 2, Nr 1, pp 54-58 (USSR)

ABSTRACT: The determination of nitrogen, sulphur, and halogens is very important for practical analysis in organic chemistry. Long since chemists have devoted attention to the employment of the afore-mentioned metals for this purpose (Refs 1,2). Alkali metals exhibited several deficiencies in this connection (Refs 2-5). In this article the authors give a description of a qualitative determination of nitrogen, sulphur, and halogens in organic substances, wherein metallic magnesium and calcium are used. Table 1 shows the fixable minimum (γ) in the determination of the individual elements (N, S, halogen, and C) by means of Mg or Ca. It results therefrom that calcium is suited for a qualitative analysis of the afore-mentioned elements. The advantage afforded in the quantitative analysis

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by the calcium method as against the magnesium method are indicated in table 2. These are the substances in which the elements mentioned were determined: α-phenyl-N-methyl-phenylene-thiazine perchlorate, sulfanilic acid, acridine, aminopyridine, hexachloro-ethane, and mercapto-benzothiazole. However, the properties of metallic magnesium (easily accessible, comfortable work, and low specific weight) favor the application of the magnesium method in addition to the calcium method. There are 2 tables and 7 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet; Nikolayevskiy korablestroitel'nyy institut i Odesskiy institut inzhenerov morskogo flota (Moscow State University, Nikolayev Ship-building Institute, and Odessa Institute for Engineers of the Sea-going Fleet)

SUBMITTED: November 4, 1957

FEDOSEYEV, P.N.; CHERNYSHEVA, T.Ye.

Micromethods of the quantitative determination of carbon, hydrogen and nitrogen in organic matters in reduced size tubes under vacuum. Izv.vys.ucheb.zav.; khim.i khim.tekh. 2 no.6: 899-903 '59. (MIRA 13:4)

1. Niklayevskiy korablestroitel'nyy institut. Kafedra khimii.
(Carbon--Analysis)
(Nitrogen--Analysis)
(Hydrogen--Analysis)

5(3)

AUTHORS: Fedoseyev, P. N., Sobko, M. Ya. SOV/75-14-1-24/32

TITLE: New Methods of Quantitative Determination of Halogens in Organic Substances (Novyye metody kolichestvennogo opredeleniya galogenov v organicheskikh veshchestvakh)

PERIODICAL: Zhurnal analiticheskoy khimii, 1959, Vol 14, Nr 1, pp 118-122 (USSR)

ABSTRACT: The existing methods for the quantitative separate determination of several halogens from a weighed-in portion of organic substance have a number of faults. The new method elaborated by the authors in the present paper permits simultaneous separate quantitative determination of two halogens (chlorine and bromine or chlorine and iodine) in organic substances which contain nitrogen. For the purpose of facilitating combustion of the substance chromium oxide was used as catalyst. It was found that 600 - 700° potassium bromide and sodium bromide do not react with nitrogen because the equilibrium of the reaction $2\ NO_2 \rightleftarrows 2\ NO + O_2$ under these conditions tends considerably in the direction of the slowly reacting NO. When emerging from the heated absorption tube NO is, however, easily oxidized to NO_2 which reacts with moist

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potassium iodide. Therefore, the authors used crystalline sodium carbonate and a solution of NaOH and perhydrol instead of potassium iodide for the removal of the mists formed by the decomposition of the halogen-containing substance and for the simultaneous absorption of halogens. Instead of sodium carbonate also sodium bisulfate can be used. Before titration with potassium thiocyanate, the nitric oxides must be removed by boiling the solution. In gravimetric determination of chlorine about 25 - 30 g bromide is necessary for filling the absorption tube. This quantity is sufficient for more than 50 determinations if the weighed-in portions amount to between 0.05 and 0.1 g. The success of the analysis depends on the maintenance of a constant temperature range in the absorption tube. The method described may serve for the analysis of organic substances containing both mobile and firmly bound halogen. It permits combustion of large weighed-in portions, by which the determination of small quantities of halogens is rendered possible. The error committed in determination amounts to $\pm$ 0.1 - 0.3%. Gravimetric determination takes 50 - 60 minutes and titrimetric determination 20 - 30 minutes.

New Methods of Quantitative Determination of Halogens in Organic Substances

SOV/75-14-1-24/32

The apparatus used is shown in form of a schematical drawing and is described in this paper. The operational regulations for the simultaneous separate determination of chlorine and bromine as well as of chlorine and iodine in organic substances containing nitrogen as well as of such as contain nitrogen and sulfur are given in detail. There are 2 figures, 2 tables, and 3 references, 2 of which are Soviet.

ASSOCIATION: Nikolayevskiy korablestroitel'nyy institut im. S. O. Makarova (Nikolayev Shipbuilding Institute imeni S. O. Makarov)

SUBMITTED: June 22, 1956

Card 3/3

5.3620
5.5200

S/153/60/003/02/20/034
B011/B006

AUTHORS: Fedoseyev, P. N., Lagoshnaya, R. M.

TITLE: A New Quantitative Determination Method of Sulfur in Organic Substances

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1960, Vol. 3, No. 2, pp. 320-323

TEXT: With quick volumetric methods for determining sulfur, fog-like sulfur trioxide is formed, which is not absorbable and thus distorts the analytical results. In the present paper, the authors investigated methods of destroying this fog, which forms on burning organic substances containing sulfur in a stream of O_2. They used various powdery materials. The rate of flow of O_2 was 100 - 150 ml/min. Combustion products were passed through a quartz tube containing filter materials unreactive toward sulfur oxides. The following substances were tested as filter materials: the sulfates of barium, strontium, calcium, copper, manganese, as well as amorphous silic-

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A New Quantitative Determination Method of Sulfur in Organic Substances

S/153/60/003/02/20/034
B011/B006

ic anhydride, glass wadding, and pulverized quartz sand. Grain sizes of these substances ranged from 0.25 mm to 0.5 mm. In all cases, the application of these substances yielded too low values for sulfur. The authors then used substances which are not indifferent to sulfur oxides, i. e. chlorides, bromides, and iodides of several alkali- and alkaline-earth metals. By reacting with sulfur oxides, an equivalent amount of hydrogen halide was formed, which was easily determined volumetrically. The best results were obtained with barium chloride, whilst those obtained by using various other metal halides were not quantitative. Basing on results obtained, the authors developed new methods for the quantitative determination of sulfur in compounds containing neither nitrogen nor halogen. The apparatus used for this purpose is shown in the figure on p. 321. The analytical procedure is described. The substance to be analyzed is put in a quartz boat and covered with chromium oxide. The rate of flow of the O_2 current must not exceed 100 ml/min. The combustion gases are passed through tubes filled with $BaCl_2$ and absorbed in an absorber containing 3% hydrogen peroxide. The sulfur contained in the peroxide solution and in the wash

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A New Quantitative Determination Method of Sulfur in Organic Substances

S/153/60/003/02/20/034
B011/B006

water used for rinsing the absorber and adapter is determined by titration with 0.1 N alkali solution. The sulfur content is found with the aid of the formula $S = \frac{V.N.E.}{a.1000} \cdot 100\%$, where v denotes the alkali volume required for titration (in ml), N the normality of the alkali solution, E the gram-equivalent of sulfur, and a , the weighed portion of the organic substance. The analysis takes 45 - 60 min. The Table on p 322 shows the analytical results obtained in the analysis of sulfosalicylic acid, bis-(1,1-dimethyl-4-penten-3-one) sulfide, diethyl sulfone dimethyl methane, ditolyl sulfide, sulfur, coal No. 1 - 4, and rubber No. 1 - 4. The authors proved the applicability of this method for determining combustible sulfur in different types of coal, as well as the total sulfur in rubber (Table). The rubber may not contain alkali- or alkaline-earth metals. Small quantities of zinc do not influence the results. The method is accurate to about $\pm$ 0.2 - 0.3%. There are 1 figure, 1 table, and 14 references, 6 of which are Soviet.

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A New Quantitative Determination Method of Sulfur in Organic Substances

S/153/60/003/02/20/034
B011/B006

ASSOCIATION: Nikolayevskiy korablestroitel'nyy institut; Kafedra obshchey khimii (Nikolayev Ship-building Institute, Chair of General Chemistry)

SUBMITTED: July 2, 1958

Card 4/4

FEDOSNYAV, P.N. (g.Nikolayev)

How to make a hole in a glass vessel. Khim. v shkole 15 no.6:81 N-D '60. (MIRA 13:11)

(Chemistry--Manipulation)

FEDOSEYEV, P. N.

Cand Tech Sci - (diss) "High-temperature microperiodic drying of wheat designated for seeding use, at small drops in wheat moisture." Moscow, 1961. 23 pp with diagrams; (Joint Academic Council of the All-Union Scientific Research Inst for Mechanization of Agriculture "VIM" and the All-Union Scientific Research Inst of Electrification of Agriculture "VIESKh"); 250 copies; price not given; (KL, 5-61 sup, 194)

FEDOSEYEV, P. N.

"Vacuum Method for the Micro Determinations of Carbons, Hydrogen, and Nitrogen in Organic Compounds."

A quantitative determination of carbon, hydrogen, and nitrogen in organic compounds is described based on pyrolytic degradation of the weighed sample under closed systems conditions in the presence of copper oxide in a tube partially evacuated in order to avoid any explosion or flash combustion. The tube is heated continuously for five to ten minutes. In this period pyrolysis and reduction of oxides of nitrogen are complete. Finally oxygen is passed through the red hot tube to burn non-oxidized material and to sweep the combustion products into the absorption apparatus or azotometer.
By this method, the pyrolysis and combustion are effected smoothly and in a uniform manner, regardless of the compound. Even difficult compounds such as picrates, pyrazoles, nitriles, hydrazines, and volatile substances give reliable results. In the development of this "micro-vacuum-combustion" method conventional microanalytical apparatus is used. However, the use of a shorter tube of smaller diameter yields better results. A tube 350 to 400 millimeters long and 3.5 and 4.0 millimeters in diameter is recommended; the tube volume is thus tenfold less than the Pregl tube. The method can be automated.

Paper submitted for the International Symposium on Microchemical Techniques, Pennsylvania State University, University Park, Pennsylvania 13-18 August 1961.

S.O. Markov Shipbuilding Institute, Nikolaev, U.S.S.R.

FEDOSEYEV, P. N.

"Simultaneous Micro Determination of Chlorine, Bromine, and Iodine in Organic Compounds."

As recognized by Pregl, the difficulty in the determination of individual halogens when presented together in an organic compound is their chemical similarity. One property that can be applied is the displacement of a halogen from its salts by a second halogen of greater chemical reactivity. Such displacement reactions are quantitative with sodium and potassium salts at 600-700° C. A quantitative simultaneous determination of chlorine, bromine, and iodine in a single sample is reported. The sample is pyrolyzed in a quartz tube at 900° C. The products containing free halogens and hydrogen halides are swept into an absorption apparatus charged successively with potassium bromide (at 650° C.) , potassium iodide (not heated).

The weight increase of the first charge corresponds to the chlorine content and that of the second charge to the combined chlorine and bromine content. The content of the third charge is washed into a flask and the sum of the three halogens determined by titration. The titrimetric finish with a single halogen requires thirty to forty minutes and the gravimetric finish fifty to sixty minutes; the simultaneous determination of two or three halogens requires eighty to ninety minutes. The method is practical, accurate, simple, and does not require expensive and complicated apparatus. Fluorine, if present, in the compounds is determined by separate analysis.

Paper submitted for the International Synposium on Microchemical Techniques, Penn. State Univ, Univ. Park Penna, 13-18 Aug. 1961

(S.O. Markov Shipbuilding Inst., Nikolayev USSR)

FEDOSEYEV, P.N.; YELETSKIY, A. Ye.

Thermal drying of wheat with low moisture drop in the grain.
Inzh.-fiz. zhur. no.2:63-69 F '61. (MIRA 14:4)

1. Biologicheskiy institut i Institut matematiki, Sibirskoye otdeleniye AN SSSR, Novosibirsk.
(Wheat-drying)

FEDOSEYEV, P.N.; GRIGORENKO, M.Ye.

Use of metallic magnesium in the determination of alkali metals. Zhur. anal. khim. 16 no. 1:100-102 Ja-F '61. (MIRA 14:2)

1. S.O. Makarov Nikolayev Shipbuilding Institute.
(Magnesium) (Alkali metals)

FEDOSEYEV, P.N. (Nikolayev)

Method to produce catalysts for flameless surface burning. Khim. v shkole 16 no.2:77-78 Mr-Ap '61. (MIRA 14:6)
(Catalysts)

FEDOSEYEV, P.N. (Nikolayev)

Demonstrating the experiment with supersaturated solutions.
Khim. v shkole 16 no.5:90 S-O '61. (MIRA 14:9)
(Chemistry—Experiments) (Solutions, Supersaturated)

FEDOSEYEV, P.N.; IGNATENKO, L.S.

On pyrolysis, rapid and slow decomposition of a substance, and on the role of catalysts in elementary organic quantitative analysis. Trudy Kom.anal.khim. 13:33-35 '63. (MIRA 16:5)

1. Nikolayevskiy korablestroitel'nyy institut imeni admirala S.O.Makarova i Odesskiy inzhenero-stroitel'nyy institut.
(Organic compounds) (Chemistry, Analytical—Quantitative)

FEDOSEYEV, P.N.

Technology and machinery system for harvesting grain in Siberia. Mekh. i elek. sots. sel'khoz. 21 no.4:11-13 '63. (MIRA 16:9)

1. Rukovoditel' otdela zernouborki Sibirskogo filiala Vsesoyuznogo nauchno-issledovatel'skogo instituta mekhanizatsii sel'skogo khozyaystva.
(Siberia--Grain--Harvesting) (Harvesting machinery)

UCHEN', M.T.; FEDOSEYEV, P.N.

Method for quantitative determination of halogens and sulfur and simultaneous determination of halogens and sulfur in organic substances. Izv.vys.ucheb.zav.; khim.i khim.tekh. 8 no.4:619-622 '65. (MIRA 18:11)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti, kafedra organicheskoy khimii.

L 38362-66

ACC NR: AP6019949 (A) SOURCE CODE: UR/0323/66/000/001/0078/0082

AUTHOR: Dukhota, V. A. (Engr.); Fedoseyev, P. N. (Prof.; Dr. of Chemical Sciences) 168

ORG: Department of General and Analytical Chemistry, Kiev Technological Institute of the Light Industry (Kafedra obshchey i analiticheskoy khimii Kievskogo tekhnologicheskogo instituta legkoy promyshlennosti)

TITLE: Complexometric microdetermination of calcium and magnesium in clean raw hide by the "buretless titration" method

SOURCE: IVUZ. Tekhnologiya legkoy promyshlennosti, no. 1, 1966, 78-82

TOPIC TAGS: calcium, magnesium, trace analysis

ABSTRACT: The authors propose a simple and rapid complexometric method for determining calcium and magnesium in clean raw hide and finished leather by using test paper instead of a buret. The paper is prepared by depositing a known volume of titrated reagent solution on filter paper of known size. Clean raw hide is analyzed for calcium, and leather is analyzed for calcium and magnesium by using paper impregnated with the chelating agent Trilon B. Triethanolamine is used to mask the small amount of iron present, and the fluorescent indicator "fluorekson" is employed in the titration. The technique is recommended for extensive applications in industrial and scientific research laboratories. Orig. art. has: 4 tables.

SUB CODE: 07/ SUBM DATE: 09Aug65/ ORIG REF: 002/ OTH REF: 002

Card 1/1 vmb

KRICHIKOV, P.F., gornyy inzh.; FEDOSEYEV, P.I., gornyy inzh.; KHINN, G.L., gornyy inzh.; YARMIZIN, V.A., gornyy inzh.

Semiautomatic control of the mechanisms of hoisting equipment shaft doors. Gor. zhur. no.7:51-54 Jl '61. (MIRA 15:2)

1. Tyrnyauzskiy kombinat.
(Mine hoisting)
(Automatic control)

FEDOSEYEV, P.N.; IGNATENKO, L.S.

Method of burning highly volatile organic liquids in the micro-determination of carbon and hydrogen in open capillaries by means of chromium oxide. Izv. vys. ucheb. zav.; khim. i khim. tekh. 7 no.5:797-800 '64 (MIRA 18:1)

1. Kiyevskiy tekhnologicheskiy institut legkoy promyshlennosti i Nikolayevskiy korablestoitel'nyy institut.

FEDOSEYEV, P.N., akademik

Science and the ideological life. Vest. AN SSSR 33 no.8:8-28 Ag '63. (MIRA 16:8)

(Science)

FEDOSEYEV, P.N., akademik

Philosophy and natural science. Priroda 52 no.9:3-8 '63.
(MIRA 16:11)

FEDOSEYEV, P.S.

Man and the seven-year plan. Zdorov'e 5 no.12:1-3 D '59.
(MIRA 13:4)

1. Sekretar' Staro-Minskogo rayonnogo komiteta Kommunisticheskoy partii Sovetskogo Soyuza (Krasnodarskiy kray).
(KRASNODAR TERRITORY--PUBLIC HEALTH, RURAL)

L 13674-63 EWT(1)/BDS AFFTC/ASD/ESD-3 JD

ACCESSION NR: AP3004670 S/0286/63/000/006/0049/0050

AUTHOR: Kon'kov, Yu. A.; Fedoseyev, R. Yu. 56

TITLE: Pneumatic relay. Class 42, No. 153623 25

SOURCE: Byul. izobret. i tovarny*kh znakov, no. 6, 1963, 49-50

TOPIC TAGS: pneumatic relay, automation, automatic control

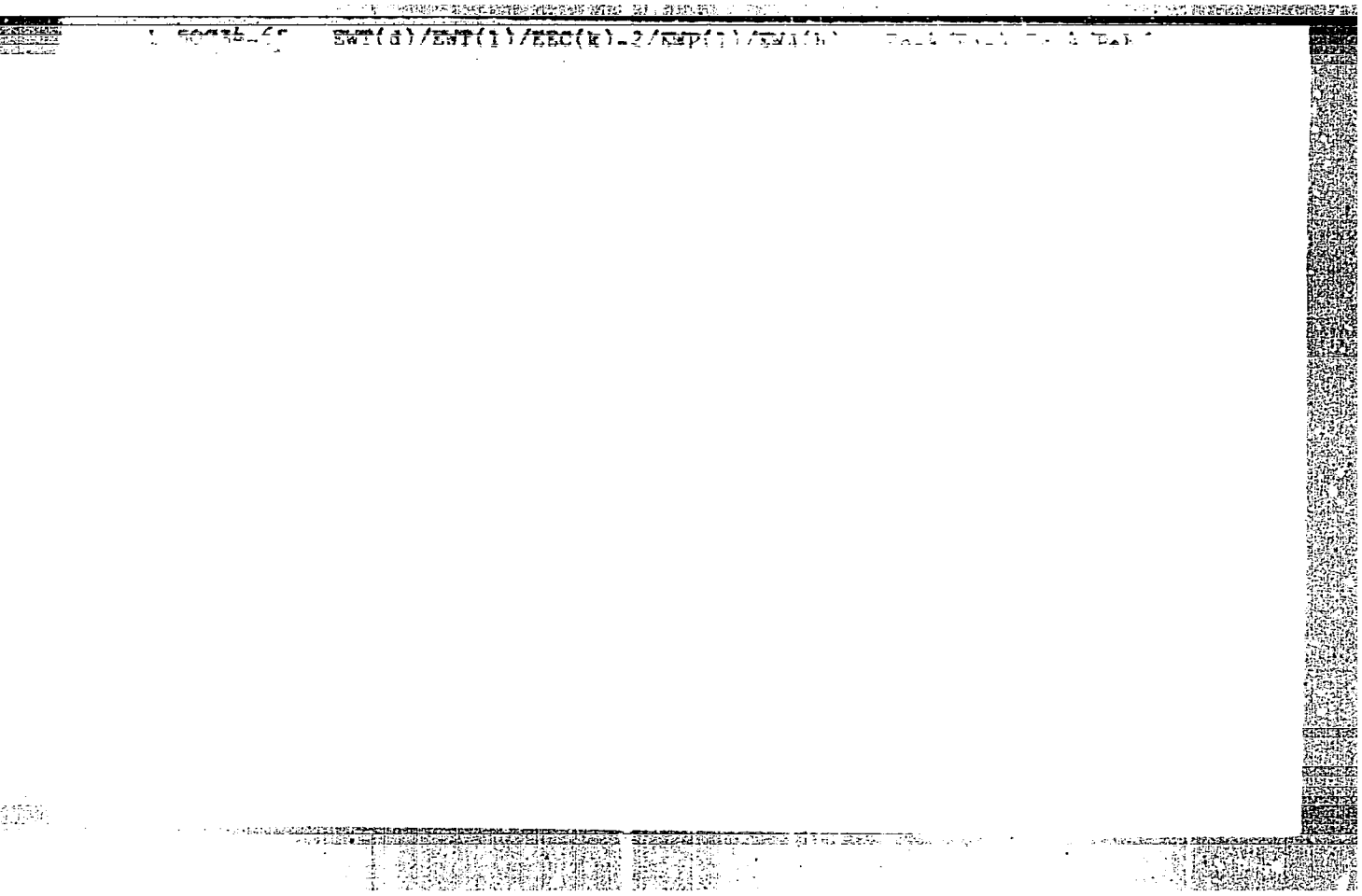
ABSTRACT: The pneumatic relay consists of a housing divided by membranes into several chambers, into one of which a command signal is supplied. To decrease the relay operating time and reduce the effect of pneumatic-line leakages on accuracy, the relay is connected to an auxiliary relay through a throttle valve and a storage tank; the chambers of the auxiliary relay are connected with the lines of the command and minimal pickup signals. Orig. art. has: 1 figure.

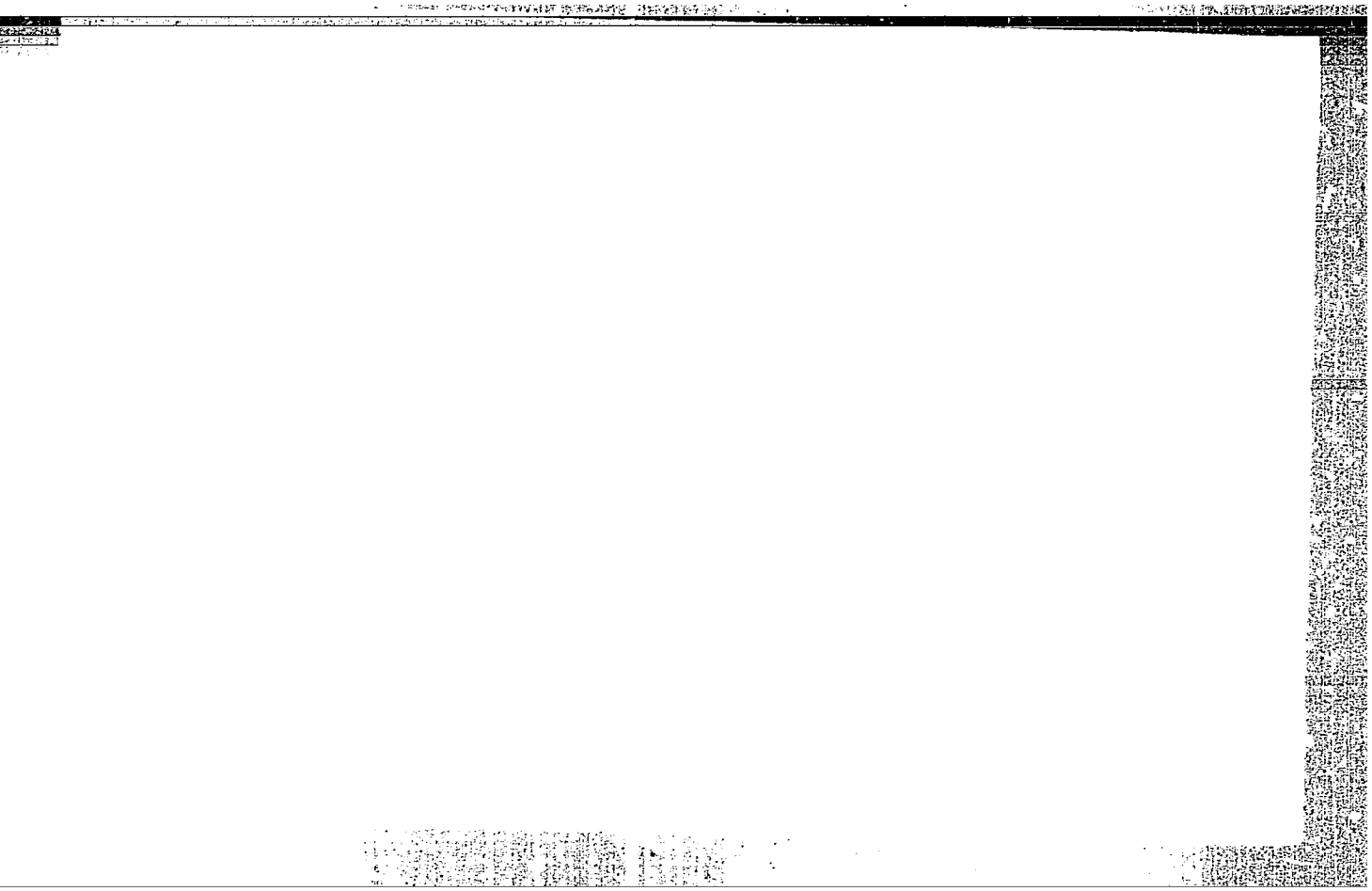
ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 27Aug63 ENCL: 01

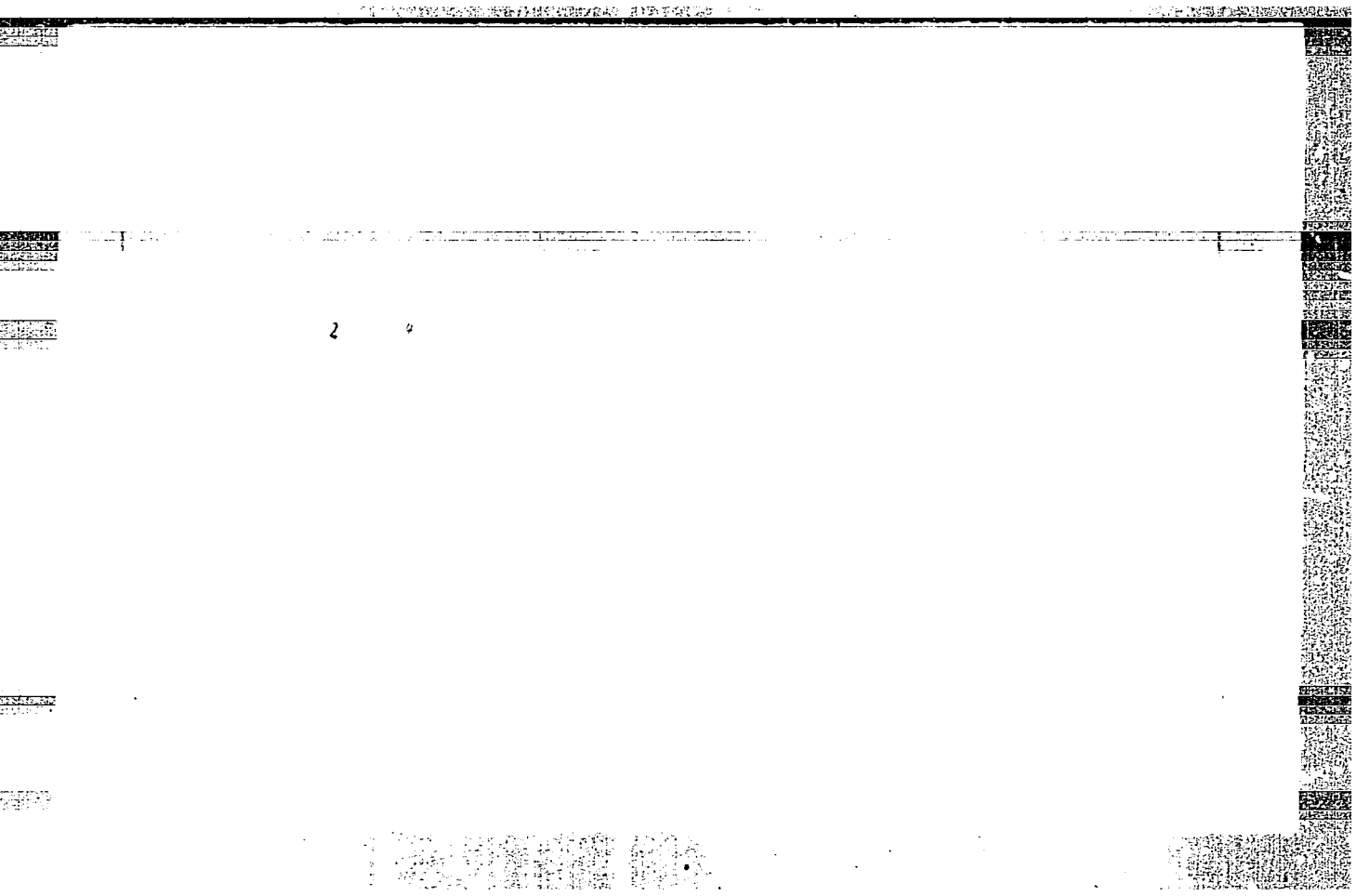
SUB CODE: AE,CG NO REF SOV: 000 OTHER: 000

Card 1/1





APPROVED FOR RELEASE: Thursday, July 27, 2000 CIA-RDP86-00513R00041272(



ACC NR: AP7002595 (A,N) SOURCE CODE: UR/0413/66/000/023/0101/0101

INVENTOR: Fedoseyev, R.Yu.; Vasil'yeva, V.V.; Kon'kov, Yu.A.; Sidorov, G.V.; Yakovlev, A.B.; Semenov, A.I.; Drogin, L.V.

ORG: none

TITLE: Pneumatic memory device. Class 42, No. 189233

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 23, 1966, 101

TOPIC TAGS: ~~automatic pneumatic control~~, pneumatic device, pneumatic servomechanism, servosystem, memory cell

ABSTRACT: An Author Certificate has been issued for a pneumatic memory device containing a servosystem with a memory chamber and a valve. To reduce gas leakage from the pressurized chamber, a three-diaphragm two-contact valve is added. The connections between valves are shown in Fig. 1. [WP]

Card 1/2 UDC: 681.142.07-525

ACC NR: AP7002595

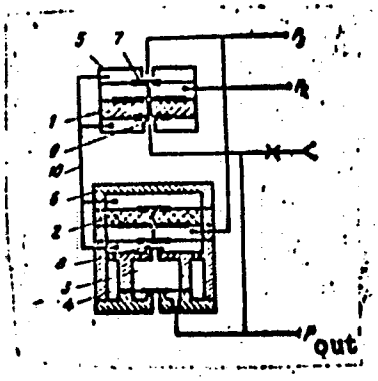


Fig. 1. Pneumatic memory device

1, 2, 3, 5 - Chambers; 5 - three-diaphragm value; 6 - valve; 7, 8, 9 - contacts; 10 - channel; P_3 - channel of memorized signal; P_{out} - output channel of servo-system.

SUB CODE: 09, 13/ SUBM DATE: 17Mar65/ ATD PRESS: 5114

Card 2/2